A geographical analysis of the role of unconventional public transport in selected rural areas of Scotland

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ABSTRACT

This thesis undertakes a geographical analysis of the role of unconventional public transport in selected rural areas of Scotland, with special reference to the Highland and the Borders Regions. The term "unconventional public transport" has been defined, for the purpose of the thesis, as including all forms of public passenger transport other than regular conventional bus, rail and ferry services. The term, in this context, applies to the use of smaller vehicles whose operation is wholly or partially financed or supported by the Local Authority.

The forms of unconventional public transport investigated include Postbus Services, Community Bus Services, Voluntary Social Car Schemes, Dial-a-Ride, Courier Services and the use of school vehicles by fare paying passengers.

A geographical analysis of the distribution of these supported schemes and their role is undertaken with special reference to the Highland and Borders Regions but set within the context of Rural Scotland and the network of conventional bus and rail services. These two regions of mainland Scotland are characterised by low population densities, a spatially dispersed settlement pattern and high levels of car ownership where the opportunities for the development of unconventional modes are considerable.

The advantages of innovatory public transport in the Highland and Borders Regions have been demonstrated to be as a supplementary service, in many cases as an emergency service, as a lower cost alternative to tendered conventional bus services, as a more flexible and convenient service and, in areas with relatively high levels of car ownership, as a standby facility when the family car is not available.

The effects of the Transport Act 1985 are also considered but found to be of relatively little significance in influencing the number and distribution of unconventional modes, despite the availability of new forms of finance from Central Government. Future prospects for unconventional public transport seem to be good especially in the field of development of the use of school transport by fare paying passengers and of courier-type services.

A GEOGRAPHICAL ANALYSIS OF THE ROLE OF UNCONVENTIONAL PUBLIC TRANSPORT IN SELECTED RURAL AREAS OF SCOTLAND.

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DECLARATION

I confirm that no part of the material offered has previously been submitted by me for a degree in this or in any other University. If material has been generated through joint work, my independent contribution has been clearly indicated. In all other cases material from the work of others has been acknowledged and quotations and paraphrases suitably indicated.

ACKNOWLEDGEMENTS

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2. Borders Regional Council - Departments of Planning and Development, Roads and Transportation and the Department of the Chief Executive.
3. Berwickshire, Ettrick and Lauderdale, Roxburgh and Tweeddale District Councils.
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10. Mr Chris Roberts Royal Mail Consultancy Services Group, Chesterfield.
11. Mr A J Roberts Transport Officer and Mr D Summers of the Roads and Transport Department of Highland Regional Council.
12. Mr Peter Fuller, Public Transport Officer, Roads and Transportation Department Borders Regional Council.
13. The Public Transport Officers of the Regional Councils of mainland Scotland for details of the distribution

of unconventional public transport services in rural Scotland.

14. The Public Transport Officers, and their staff of the 47 Shire County Councils of England and Wales for general comments on the problems of rural public transport provision.
15. Mr Ken Branch formerly Assistant Public Transport Officer, Department of Highways and Engineering, Cumbria County Council.

Statistical sources and diagrams used in the text are appropriately acknowledged. However the opinions expressed, interpretation and method of presentation adopted in this thesis are entirely those of the writer who has drawn on some 30 years experience of studying the planning problems of public transport provision in rural areas in Northumberland, the Anglo-Scottish Borderlands, Cumbria and Staffordshire.

CHAPTER ONE

INTRODUCTION
THE AIMS OF THE STUDY AND THE METHODS USED.

1 DEFINITION OF UNCONVENTIONAL PUBLIC TRANSPORT

1.1.1. The term "unconventional" has been defined for the purposes of this thesis as including all forms of public passenger transport other than regular conventional bus, rail and ferry services. The term, in this context is usually associated with the use of smaller vehicles whose operation is wholly or partially financed or supported by the Local Authority. Financial provision for the operation of unconventional public transport is generally incorporated in the current Regional Council Transport Policies and Programme where they are generally itemised under the term "experimental schemes". Informal car sharing arrangements which are not financed or organised by the Local Authority will be excluded from the scope of the study due to their transitory nature and general lack of documentation. Similarly taxi services which are not financed or supported by the Local Authority will be excluded.

1.1.2. Other typical features of unconventional public transport in the context of the study include:

1. Flexibility of timetable and routing
2. The use of part-time or volunteer drivers.
3. The use of multi-functional vehicles which can carry both passengers and freight.
4. The combination of the provision of public transport with other journey purposes.
5. Availability of these services to the general public and not exclusively to certain sections of society such as the disabled.

1.1.3. The most common forms of unconventional public transport which will be discussed in the thesis and are represented in rural areas of Scotland include the following:

1. Postbus Services
2. Community bus services
3. Voluntary social car schemes
4. Shared hire car schemes supported by the Local Authority.
5. Dial-a-ride services
6. The use of school vehicles by adult fare-paying passengers.
7. Other car sharing arrangements financed or supported by the Local Authority.
8. Courier type services using multi-functional vehicles adapted for the carriage of both passengers and freight.

1.1.4. Specialised welfare transport exclusively for the use of the sick and disabled will be deliberately excluded from the scope of the thesis since such services are not usually available to the general public and hence do not fall within the definition of public passenger transport.

1.1.5. Thus the main features of unconventional public transport which have been identified for the purpose of the thesis are:

1. Services which are financed or supported by the Local Authority.
2. Services which are available to the general public and not exclusively to the sick and disabled.
3. Public transport services which are of an "innovatory" nature and exclude regular, conventional bus and rail services which operate to a fixed timetable and generally tend to rely on the use of larger vehicles.

1.1.6. The scope of the study will thus be deliberately confined to types of unconventional public transport which are financed wholly or partially by the Local Authority concerned. Such experimental schemes are generally fully documented in the appropriate Regional Council Transport Policy and Programme. Thus statistical data regarding patronage, vehicle mileage and costs of operation is fairly easily available with the co-operation of the Regional Council concerned. Informal arrangements such as car sharing schemes, on the other hand, tend to lack any documentation due to their impermanent and transitory nature. For these reasons the thesis will concentrate on formal schemes supported or financed by the Regional Council and excludes informal, often transitory unconventional transport arrangements from the scope of the dissertation.

1.2. DEFINITION OF STUDY AREA

1.2.1. The thesis will focus on two selected, contrasting and physically separate rural areas in Scotland.

1. The Highland Region in the north of the country
2. The Borders Region in the south east.

However, whereas detailed investigation will be made of the pattern of public passenger transport in these two regions, they will be studied within the context of rural Scotland as a whole.

1.2.2. The two study areas were chosen because their geographical character measured in terms of their settlement pattern and population density and distribution represent a challenging market for the provision of public passenger transport. The two Regions are the most thinly populated areas of Scotland with an average overall population density at 1991 of 0.08 persons per hectare in the Highland Region and 0.22 persons per hectare in the Borders Region. This compares with 0.64 for Scotland as a

whole. The physical geography of these two contrasting rural areas with their spatially dispersed settlement pattern means that where potential demand for public transport does exist it is dispersed over wide areas and there are few significant concentrations of demand, thus making it difficult to operate conventional public transport profitably. In 1991 44% of the population of the Highland Region and 43% of the population of the Borders Region resided in settlements of under 2500 population.

1.2.3. The predominantly rural character of both the Highland and Borders Regions of Scotland provides considerable opportunities for experimentation with innovatory public transport as a means of supplementing regular conventional bus and rail services especially in areas where demand for public transport is small and intermittent due to a dispersed settlement pattern and the prevailing generally high levels of car ownership.

1.2.4. It is appreciated that the public transport network in Rural Scotland is fluid and constantly evolving and changing. The current study will, therefore, attempt to assess the position as it was in or around Summer 1991 (the Census of Population year).

1.3. THE FRAMEWORK OF THE THESIS

1.3.1. The thesis will commence by outlining its main aims and objectives, as described above. It will then proceed (Chapter 2) to review recent legislation and literature relevant to the planning and operation of unconventional public transport. It will outline legislation from the 1930 Road Traffic Act onwards which has had a direct impact on the development and increasing popularity of innovatory public transport in Shire Counties of England and Wales and Regions of Scotland and will note the trend which has been

evident from a fully regulated public transport system subsidised by the Regional Council to increasing de-regulation of bus services culminating in the Transport Act 1985.

1.3.2. Recent literature, including relevant Public Transport Plans and Transport Policies and Programmes, dealing with unconventional public transport in different parts of Great Britain will then be reviewed in order to identify the role of this form of public transport as a supplementary facility which can also function as an emergency service for disadvantaged members of the rural community who no longer have access to or are unable to drive a private car. International studies of the role of innovatory public transport will also be discussed.

1.3.3. Chapter 3 will describe the distribution of unconventional public transport in rural Scotland using the results of a recent survey of Regional Councils. The role of each of the defined unconventional modes will be assessed in the context of Regional public transport policies, thus setting the scene for a more detailed analysis of these matters in the Highland and Borders Regions.

1.3.4. Chapter 4 indicates case studies of two Regions in different parts of Scotland - the Highland Region and the Borders Region where the market for conventional public transport is intermittent and spatially dispersed and where the opportunities for developing unconventional services are considerable. It examines the position and geographical character of these two Regions as markets for unconventional public transport in terms of their settlement pattern, age and sex structure of the population, levels of car ownership and the changing distribution of educational and service facilities

which have become increasingly concentrated in urban areas. This preliminary assessment will conclude by discussing the type of need for public transport in the two Regions and the potential role of unconventional transport in meeting this need.

1.3.5. Chapter 5 will look at unconventional public transport in the context of the total network of bus and rail services in the Highland and Borders Regions. It will point out that these networks have contracted in recent years, leaving gaps which can be filled by innovatory services which can provide a supplementary, low cost, public transport facility in some parts of these two Regions.

1.3.6. Chapter 6 is a survey of public transport needs with special reference to the two Regions.

1.3.7. Chapter 7 will examine the pattern of unconventional public transport in the Highland and Borders Region in greater depth and will discuss its role as a means of resolving the inaccessibility of rural communities. It will focus attention on the transport networks provided by the following defined modes which are supported by the Local Authority.

1. Postbus services.
2. Community bus services.
3. The use of school vehicles by fare-paying passengers.
4. The Border Courier.

It will discuss the role and economics of operation of these services as well as their pattern of distribution.

1.3.8. Chapter 8 will discuss possible future solutions to problems of inaccessibility in rural areas in relation to postbus services, community bus

services, voluntary social car schemes and the use of school vehicles by fare paying passengers.

1.3.9. Chapter 9 reviews the potential role of other unconventional modes of public transport in Rural Scotland and discusses the advantages and disadvantages of developing dial-a-ride services and courier type services in particular.

1.3.10. Chapter 10 will examine unconventional public transport since the 1985 Transport Act and the financial and material provisions of the Act as a factor stimulating further development of innovatory services.

1.3.11. Chapter 11 concludes the thesis by discussing future prospects for unconventional public transport in Rural Scotland and reviewing the role of innovations in the context of the public transport network. It summarises the findings of the thesis and itemizes the main conclusions reached.

1.4. GENERAL APPROACH

1.4.1. It is anticipated that although attention will be directed primarily on the two selected case study areas of the Highland Region and the Borders Region these will, throughout the thesis, be considered in the context of problems of public transport provision in rural Scotland as a whole.

CHAPTER TWO

A REVIEW OF RECENT LEGISLATION AND LITERATURE DEALING WITH UNCONVENTIONAL PUBLIC TRANSPORT

A. LEGISLATION

2.1 INTRODUCTION

2.1.1 Any geographical analysis of the role of unconventional public transport must be seen within the framework of recent legislation controlling its use and operation. The shape and geographical extent of the public transport network have been influenced by pieces of legislation which have had geographical implications. New legislation has acted as an instrument of transport policy which in turn has led to the expansion, contraction or continued stability of the public network. The principal transport policy changes in the United Kingdom, including Scotland, resulting from new legislation which have had a direct geographical impact on rural areas may be briefly summarised as follows.

2.2 CHANGES IN TRANSPORT POLICY

2.2.1 During the last thirty years the policy of Central Government towards rural public transport planning and operation has altered radically to one where it has been recognised as a social service which should be explicitly subsidised where necessary by both central and local government. This policy has been amended since the 1985 Transport Act to incorporate greater de-regulation of services. The thirty year period has witnessed the increasing involvement of Central and Local Government in the provision and continued operation of rural public transport. Labour administrations up to 1979 have generally regarded public transport as a social service which should operate according to a County or Regional

Public Transport Plan and should, where necessary, be supported by the Local Authority or Regional Council in Scotland. Rural public transport has been regarded, since 1975 in Scotland, as an integral part of the Regional Council Transport Policies and Programme and public transport revenue support was a component of a complete financial package which included capital and current expenditure on highway construction and maintenance, road safety and car parking provision.

2.2.2 The advent of a Conservative Government in 1979 reversed the above trend by moving towards the de-regulation of the bus industry, freer competition between operators and cut-backs in financial support for socially necessary, but unremunerative, public passenger transport. The decade since 1979 has also seen the gradual withdrawal of Central Government and Regional or County Councils from involvement in bus network planning and operation culminating in the Transport Act 1985 which led to the de-regulation of public road passenger transport and the requirement that Local Authorities should not inhibit competition between bus operators. The planning of public transport networks using subsidies as an instrument of transport policy, and as a tool to achieve co-ordination and integration of bus and rail services, was thus ended with the enactment of the Transport Act 1985 when County and Regional Councils were no longer required to prepare statutory Public Transport Plans as they had been under the terms of Section 2 of the 1978 Transport Act. Nevertheless Local Authorities continued to retain powers to support unremunerative but socially necessary services through the tendering system.

2.2.3 The geographical implications of this sequence of changes in public transport legislation have been profound in that public transport networks from

being relatively static and permanent have, since the Transport Act 1985, become fluid and impermanent and subject to sudden alteration in their shape, form and extent. Public transport networks which had previously been static and subject to a County or Regional Council Public Transport Plan suddenly became unreliable and controlled by commercial interests and changing market forces. Over-provision of services in profitable and under-provision in non-profitable rural areas or during off-peak periods in the evening or on Sundays became the norm. Although Local Authorities were given powers to provide these latter, non-commercial services using a system of competitive tendering, this was often an inadequate alternative for the old system of subsidising complete networks of unremunerative, but socially necessary routes.

2.2.4 The changes which have occurred in rural transport policy in the United Kingdom since 1930 may be structured around the following White Papers or Acts of Parliament, all of which also apply to Scotland as well as the rest of the U.K. These pieces of legislation have had important geographical implications for the development of unconventional public transport as a supplementary transport facility to conventional bus, rail and ferry services.

2.3 RECENT LEGISLATION

a) Road Traffic Act 1930

2.3.1 This legislation was enacted on order to regulate competition in the bus industry and to maintain vehicle safety standards. Under the Act each operator was required to obtain a Road Service Licence from the Traffic Commissioners who were granted powers to adjudicate on many aspects of bus operation, including fares and levels of service. In practice, bus operators were granted territorial

monopolies in return for providing unremunerative, but socially necessary, services which were cross-subsidised from their more profitable routes.

2.3.2 In 1961 the Committee on Rural Bus Services (the Jack Committee) reported on the growing problems of inaccessibility in rural communities and the economic difficulties facing bus operators. The Committee supported the existing licensing arrangements and the monopoly position of some bus companies resulting from the provisions of the Road Traffic Act 1930, which had enabled them to maintain unprofitable services by cross-subsidization from their more profitable enterprises. It also supported the principle of using dual purpose vehicles as school buses and post bus services adopted for the carrying of fare paying passengers as well as school children and post office mail. It recommended the subsidy by Local Authorities of unprofitable but socially necessary rural bus services and the introduction of a system of fuel tax rebate to assist rural operators financially. It concluded that "the present and probable future levels of rural bus services are not adequate to avoid a degree of hardship and inconvenience sufficient to call for special steps." (page 2 para 8).

b) Transport Act 1968

2.3.3 This legislation, introduced by a Labour Government, was perhaps the most comprehensive and radical Act dealing with public transport provision in recent years. Provisions included:

1. The establishment of the National Bus Company.
2. The creation of Passenger Transport Authorities in Metropolitan Counties for planning, operating and managing local transport services.

3. The introduction of New Bus Grants of up to 50% where buses are mainly used for stage carriage work. These grants were fully phased out in 1984.

4. The granting of powers to Local Authorities (County and Rural District Councils) to subsidise bus services "Which are for the benefit of persons residing in rural areas" (Section 34, Transport Act 1968).

5. It allowed Local Authorities to carry fare paying passengers on school contract services. (Section 30 Permit Services).

c) Local Government Act 1972

2.3.4 This Act, which was implemented in 1974 (1975 in Scotland), led to the reorganisation of the pattern of local government and the granting of wider powers to County and Regional Councils relating to transport planning. The provisions of the Act led to the following:-

1. Each County Council (or Regional Council in Scotland) was required to prepare an annual Transport Policy and Programme (TPP) indicating existing policies and progress made towards their implementation and allocating transport expenditure for the next five year period.

2. Section 203 of the Act gave powers to County Councils to "develop policies which will promote the provision of a co-ordinated and efficient system of public passenger transport to meet the needs of the County and to take such steps to promote the co-ordination, amalgamation and re-organisation of road passenger transport undertakings in the County as appears to be desirable". The equivalent legislation in Scotland was Clause 151 (1) of the Local Government (Scotland) Act 1973 which gave similar powers to Regional Councils.

3. The Act led to the provision of Transport Supplementary Grant as additional funds for transport expenditure. County and Regional Councils were given powers to administer the distribution of TSG.

d) Passenger Vehicle (Experimental Areas) Act 1977

2.3.5 This Act led to the relaxation of the bus licensing system in certain defined geographical areas so that innovative services could be introduced. The Act was used to set up the RUTEX programme of experimental schemes in 1977-79. There were 15 such schemes of which four were located in Scotland (Strathclyde Region) using small vehicles. The RUTEX experiments are fully described in a later section (para 2.7.6).

e) The Minibus Act 1977

2.3.6 This Act was aimed at the relaxation of public service vehicle licensing regulations for minibuses operated by voluntary organisations. It attempted to free voluntary organisations, which are unlikely to compete with operators of conventional bus services, from the restrictions then imposed by the system of public service vehicle licensing. The Act applies to vehicles with a seating capacity of 8 to 16 passengers which:-

1. Are not intended for the carriage of the general public.
2. Are not operated primarily to make a profit.
3. Are being used by educational, religious, social, welfare and other organisations where activities are for the benefit of the community.

The Act was seen as the first step towards the relaxation of public service vehicle licensing in rural areas.

f) Transport Act 1978

2.3.7 Section 1 of the Act reaffirmed the role of County or Regional Councils as co-ordinators of public passenger transport and introduced further procedures to implement responsibilities.

1. Section 2 for the Act empowered each County or Regional Council to publish an annual Public Transport Plan (PTP) for the succeeding five years. This was incorporated within the existing annual Transport Policies and Programme by Regional Councils in Scotland. The Plan was to contain a review of the County's (or Regions) public transport needs and the extent to which these needs were being met by existing services. The Plan also outlined the Council's policies and objectives for public transport and estimates of the financial resources required for the realisation of these policies and objectives.

2. Section 5 of the Act introduced further relaxation of the licensing system to encourage the development of Community Bus Services in areas where there were no other public transport facilities available.

3. Section 7 of the Act permitted car sharing for social and other purposes.

g) Transport Act 1980

2.3.8 This Act reflected the anxiety of the new Conservative government that the widest range of options for meeting transport needs should be available and that greater use be made of independent operators and self-help schemes.

1. Section 2 of the Act permits car sharing by fare paying passengers (ie using vehicles of less than eight seats) provided that no profit is made. This provision led directly to further expansion of Voluntary Social Car Schemes in many Shire Counties or Regions.

2. Section 5 of the Act stated that the granting of road service licenses by the Traffic Commissioners should be biased in favour of the applicant unless this is against the public interest. County or Regional Councils should encourage new applications for road service licenses where they consider this would assist transport in their areas.

3. Section 12-15 of the Act enables County or Regional Councils to apply to the Department of Transport for the designation of the whole or part of the County or Region as a "Trial Area", in which road service licenses are not required. Trial area status should remain in force for 2-5 years. Only three Trial areas remained designated in Great Britain up to 1985.

4. Section 32 of the Act empowered a Local Education Authority to use a school bus, whether or not belonging to them, to carry fare paying passengers and to use a school bus belonging to them to provide a local bus service at times when it is not being used to provide for school transport.

h) Public Passenger Vehicles Act 1981

2.3.9 This was a consolidating Act combining all recent legislation on road passenger transport. It consolidated and amended relevant regulations for public passenger service vehicles, community buses, social car services, the operation of minibuses and the use of school vehicles by fare paying passengers.

i) Transport Act 1985

2.3.10 This Act was the culmination of piecemeal legislation aimed at the relaxation of the licensing system for road passenger transport. Its provisions were enacted in full from October 1986 and included the following.

1. The de-regulation and privatisation of conventional bus services in order to encourage competition between operators and hence, it was hoped, improve overall levels of public transport provision.

2. The replacement of the principle of cross subsidisation of bus services with single subsidies for each route.

3. A simplification of the licensing system for minibuses and regulations governing their use.

4. Allowing taxis to charge separate fares to passengers sharing the journey.

The implications of the Transport Act 1985 for the network of rural bus services in Scotland and the effect which it may have had on the role of unconventional public transport as a supplementary facility will be considered in greater detail in a later chapter.

2.3.11 Thus legislation concerning the operation and use of unconventional public transport has evolved during the last thirty years as a result of the differing policies of Labour and Conservative Governments. Legislation applicable to Scotland has closely paralleled that for England. The concept of a planned public transport system, with maximum involvement of County and Regional Councils, culminated in the Transport Act 1978. This legislation developed a concept, which was initiated in the Transport Act 1968, of regarding public road passenger transport as a social service which should receive financial support from Central Government in the form of fuel tax rebate and New Bus Grant and from Local Government (including both District and County or Regional Councils) in the form of public transport revenue support. In England the Rural Development Commission has also been given addition-

al powers to support rural public transport services which demonstrate an innovative approach. Other legislation from the Minibus Act 1977, and the Passenger Vehicles (Experimental Areas) Act 1977 have made it progressively easier for local authorities to develop voluntary social car schemes. Since the advent of the Conservative Administration of 1979 there has been a move (eg in the 1980 Transport Act) towards relaxation of the licensing system, easier entry into the bus industry, and reduced involvement of County or Regional Councils in the planning and subsidisation of public road passenger transport. This legislation culminated in the Transport Act 1985 which led to the substantial deregulation of bus services.

2.3.12 The development of unconventional public transport has thus benefited from the increasing relaxation of the licensing system. The initiation of innovatory public transport has been rendered easier by the deregulation of bus services. Since the 1985 Transport Act a system of grant aid, administered through the Rural Development Commission from their Rural Transport Development Fund, has also been made available to operators of innovatory schemes as detailed below.

2.4 **Grants for Rural Bus Services**

2.4.1 Section 108 of the Transport Act 1985 empowers the Secretary of State for Transport to make direct subsidies to bus operators in rural areas with a view to the continuance of such services. Grants may also be paid for an improvement to an existing service if it appears to the Secretary of State to involve an innovative approach. This Section also applies to Scotland and Wales, but in England a similar scheme (referred to above in Para 2.3.12) is

administered through the Rural Development Commission under its existing powers. The Rural Development Commission now has an annual fund of £750,000 (since July 1994). Corresponding funds for Scotland and Wales are £170,000 and £100,000 respectively, administered by the Scottish Office and the Welsh Office.

2.4.2 Section 109 of the Transport Act 1985 enabled the Secretary of State to pay Transitional Rural Bus Grants towards such bus services, with the approval of the Treasury, for a period of four years from a £20 million fund. Any service in an area outside a built-up area of more than 25,000 population was eligible for a grant paid on mileage as a supplement to fuel duty grant. The grant of £20 million in the first year was reduced by £5 million per annum over the following three years. The conditions applicable to this grant were as follows:-

1. The Service must qualify for fuel duty grant.
2. It must be within a rural area, as defined above.
3. It must meet any other conditions laid down by the Secretary of State.
4. It only applies to "qualifying mileage" ie mileage run by a vehicle in a rural area.

Operators of registered local rural services have remained eligible for Fuel Duty Grant, even after road service licences were abolished. Transitional Rural Bus Grant was finally phased out in April 1990.

2.4.3 Thus Transitional Rural Bus Grant and Fuel Duty Grant provided a valuable subsidy to operators of unconventional public transport. The Transport Act 1985 (Sections 108 and 109) thus makes provision for financial support from central government additional

to subsidies received from Local Authorities through the tendering system.

2.5 CONCLUSIONS

2.5.1 Since the implementation of the Transport Act 1985 on 26th October 1986 there have been two categories of regular bus services in operation these are:-

1. Commercial (non-subsidised) services.
2. Tendered (subsidised) services.

The shape of the commercial bus network has been largely conditioned by economic considerations whereas tendered services are represented by un-remunerative, but socially necessary routes which would otherwise not be part of the network. The commercial network has thus been influenced in its shape and extent by the availability of potential traffic, which in turn is related to geographical factors such as the settlement pattern and population distribution which provide a potential market for public transport. The network of tendered services, on the other hand, is dependent upon the availability of financial support from central and local government. The latter network is unprofitable, but socially necessary in order to sustain a basic bus network and minimum levels of accessibility in rural areas.

2.5.2 The role of unconventional public transport as a supplementary transport facility and, in some cases, as a emergency service will be described as the thesis unfolds. The sequence of legislation, described above, has moved towards the greater de-regulation of the bus industry and has provided an improved framework for the comprehensive development of innovatory services which can supplement the conventional bus network.

B. A REVIEW OF RECENT LITERATURE DEALING WITH UNCONVENTIONAL PUBLIC TRANSPORT

2.6 INTRODUCTION

2.6.1 Unconventional public transport includes a variety of modes of transport ranging from the private car on the one hand to the conventional bus at the other. Much work has already been undertaken on the development of unconventional modes in rural areas of the United Kingdom. These have tended to be piecemeal studies addressing the problems of selected local areas. A recent nationwide comprehensive study of the subject was undertaken in 1991 by Nutley in Unconventional and Community Transport in the United Kingdom. (1) This study covers the whole of England Scotland, Wales and Northern Ireland, but surprisingly makes little detailed reference to rural Scotland. Nutley's definition of unconventional modes of transport is much wider than that adopted by the present study. It embraces many services which are not generally available to the public such as contract buses, hospital car services and specialist services which are provided specifically for the disabled and physically handicapped passenger. These may be financed and organised by private charities or voluntary organisations. Thus Nutley's coverage is much more widespread geographically in terms of its definition of what constitutes unconventional modes than the present study which confines itself deliberately to "forms of public passenger transport which are financed or supported by the Local Authority". Information concerning this is well documented and more accurate than data on privately run modes of transport.

2.7 THE EVOLVING INTEREST IN UNCONVENTIONAL MODES OF PUBLIC TRANSPORT

2.7.1 The first study of the potential use of unconventional modes of public transport in the United Kingdom was undertaken in 1956 by the then Ministry of Transport in its publication "Village Bus." This document recommended the development of locally organised bus services adapted to carry both passengers and parcels. (2). Other early pioneering studies included "The Rural Transport Problem in Mid Northumberland," published by Northumberland Community Council in 1958, of which the writer was a joint author (3), and localised studies of the rural transport problem in the Lake District and South Devon by Thomas. These later studies were later published in 1963 in his book "The Rural Transport Problem." (4)

2.7.2 The first detailed investigation of the potential role of unconventional modes was published in the Jack Report, "Rural Bus Services" of 1961. (5) This Ministry of Transport report made several recommendations which have currently been adopted in later legislation such as the need to subsidise unprofitable, but socially necessary rural bus services, the potential for the use of school vehicles by fare paying passengers and the possible development of courier type services available for use by both passengers and freight. The Report also recommended direct financial support from central government (with assistance from County Councils) for unremunerative but socially necessary rural bus services. This recommendation was later incorporated in Section 34 of the Transport Act 1968 which made provision for subsidy by central and local government (County, Rural and Urban District Councils) for rural services which "are or will be for the benefit of persons residing in rural areas". The Jack Report of 1961 thus made the first formal recognition of the potential role of unconventional modes as a supplementary public transport facility. It

was one of the first statements of the need to subsidise unprofitable, but socially necessary rural bus services. It also proposed the introduction of a system of fuel tax rebate to assist rural operators financially, a proposal which was subsequently implemented in the Transport Act 1968.

2.7.3 Two early studies of the role of unconventional public transport in the countryside by the Department of the Environment were Study of Rural Transport in Devon (6) and Study of Rural Transport in West Suffolk. (7) Both these studies of 1971 examined the potential for the use of unconventional public transport modes to supplement conventional bus and rail services. They consider that the use of school transport by fare paying passengers under the terms of Section 30 of the Transport Act 1968, the development of post bus services, the use of dual purpose vehicles combining delivery services with passenger services and car sharing schemes and arrangements should be expanded. The two studies recognise that these are ways of providing for transport needs where there is not a conventional stage bus service and where the numbers wishing to travel at any one time are likely to be small (Para S.27 of the Devon Study).

2.7.4 Following the Report of the Jack Committee 1961 (see above) local enquiries were arranged in four rural areas in England and Wales in 1965 (8). An enquiry team was appointed by the Minister of Transport for each area (Lincolnshire, Montgomeryshire, Westmoreland and Northamptonshire) (see Figure 2.1.). One of the conclusions reached by the teams included the use of school vehicles carrying fare paying passengers as a possible solution to the rural transport problem in remote areas.

2.7.5 In 1977-79 15 rural transport experiments (RUTEX) were initiated in different parts of Britain

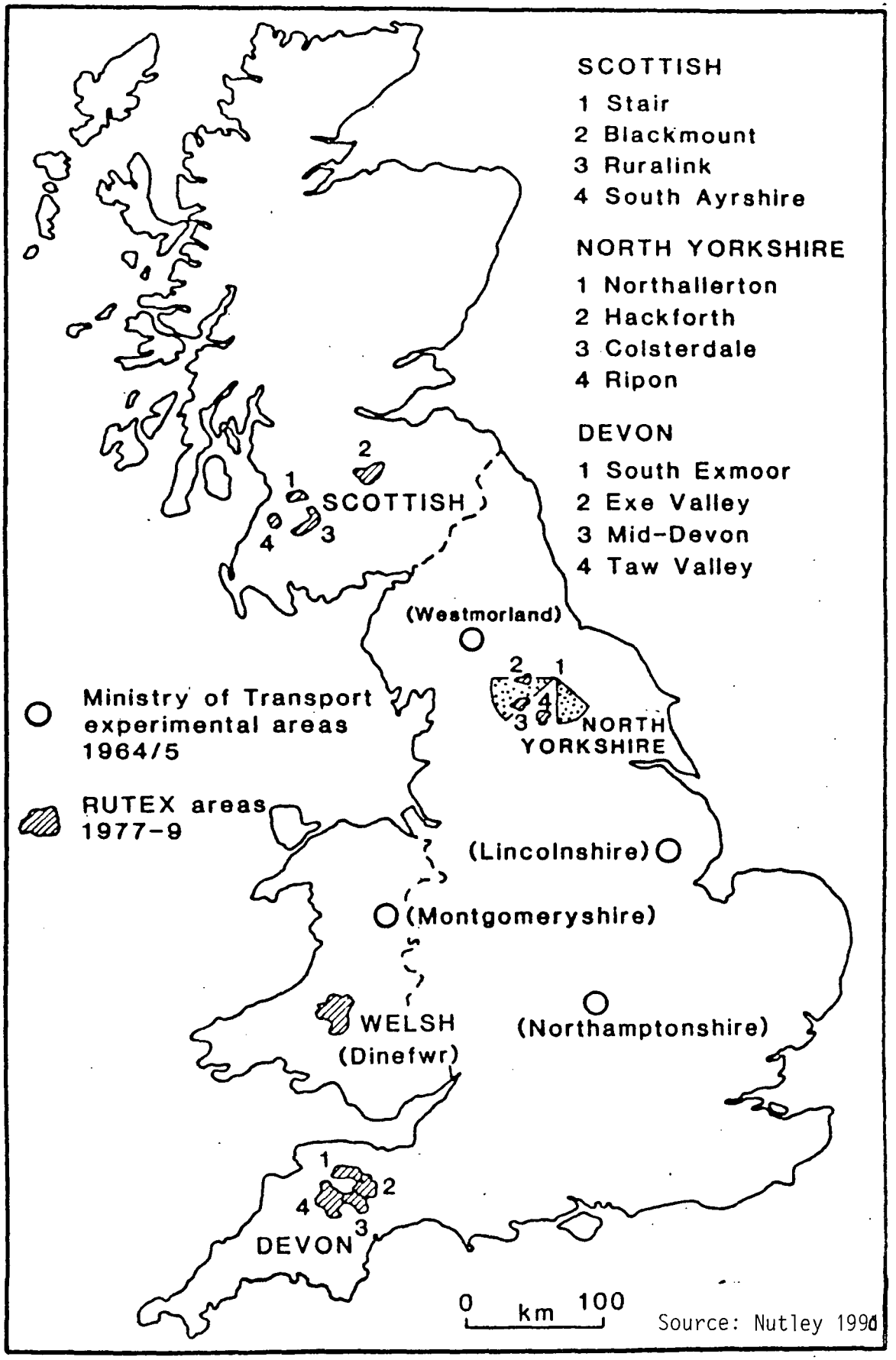

FIGURE 2.1 EXPERIMENTAL AREAS 1964-65 AND 1977-79.

(see Figure 2.1) (9). The locations selected were all deep rural areas where conventional services were never likely to be viable. The purpose of the experiment was to test the operation of a variety of unconventional modes of public transport. The experiments included services with flexible routes, car sharing arrangements, the use of hospital services and the feasibility and viability of post bus services and community bus services. All of these unconventional services required a subsidy to ensure their continued survival. The conclusion reached, after assessing the potential for each of these modes, was that voluntary social car schemes provided the best value for money in that they did not involve high labour costs. Where demand for public transport was greater and less intermittent, the post bus and the community bus were considered most viable. The operation of these innovatory forms of public transport was made possible by the enactment of the Passenger Vehicles (Experimental Areas) Act 1977. This Act allowed small vehicles to be operated in previously defined "Experimental Areas" without a Public Service Vehicle Licence or a Road Service Licence (see Para 2.3.5 above).

2.7.6 The Rural Transport Experiments (RUTEX), including the four in Scotland, are fully described by Balcombe in a Transport and Road Transport Research Laboratory Report of 1980. (10) The Scottish Rutex Working Group was responsible for the organisation and setting up of four experimental schemes in the present Strathclyde Region. These were at:

1. Blackmount
2. Stair
3. New Cumnock/Cumnock (Rural Link)
4. South Ayrshire.

Experimental schemes in the above four areas included minibus operation, post bus services, a shared hire-car service, a hospital service and the use of a conventional 27 seat bus whose regular route was flexible and diverted to meet local variations in the distribution of passengers.

2.7.7 Two other comprehensive studies of the potential role of unconventional public transport were also undertaken at about this time. In 1978 the National Consumer Council produced its study entitled "Rural Rides" (11) and in 1977 the National Council of Social Services produced its report "Rural Transport: New Developments in Rural Transport Provision" (12). These reports by independent bodies contained comprehensive reviews and analysis of the various experimental and unconventional services introduced in recent years in rural areas with poor or non-existent public transport.

2.7.8 Interest in innovatory public passenger transport continued during the late 1970s and early 1980s. Glassborrow (1978) looked at a wide range of alternative public transport systems which were currently available for use in rural areas of Britain (13). These ranged from the conventional bus on the one hand, to the midibus, the minibus, the post bus, the school bus and the community bus at the other.

2.7.9 Another significant study of the role of unconventional public transport in meeting the Social needs of the rural population was Hawker in 1977. (14). She noted that rural social transport schemes have been formed in many rural areas by groups of owner-drivers under Local Authority Auspices. These services organised by the Women's Royal Voluntary Service are available for visits to doctor's, dentist's, opticians or health centres, for visits to friends in care or in hospital and for the

collection of prescriptions and medical supplies. Some schemes also provide a feeder bus service which connects with the regular conventional bus or rail service. It is a requirement before these schemes are launched that there is not alternative public transport available or that the trip cannot be made at some other time. Drivers are paid a mileage rate for the service offered. Voluntary social car schemes, organised by County or Regional Councils, are now widespread throughout Britain.

2.7.10 Martin (1978) produced a comparative assessment of unconventional bus services (15). His report made an analytical assessment of unconventional bus systems and their role in the planning and operation of public transport. Particular emphasis was placed on the financial and social implications of each scheme. The use of a variable fare structure to encourage usage was also discussed as were the comparative costs of operating various forms of innovatory public transport, including dial-a-bus, minibus, jitney and subscription services (whereby a bus is hired by a group of commuters for the daily journey to work).

2.7.11 Another paper by Martin (1978) discussed the costs of operating dial-a-bus, minibus and conventional bus services with special reference to Harlow where unconventional modes had recently been replaced by regular conventional services. (16). It concluded that although a minibus fleet can be operated at about 80% of the cost of a fleet of conventional buses, smaller vehicles cannot accommodate peak loads, yet their fixed costs are broadly simular to larger vehicles. Thus only relatively small savings can be achieved by replacing larger buses with minibuses.

2.7.12 In 1977 the Transport and Road Research Laboratory held a symposium on Unconventional Bus Services (17). The Symposium brought together a wide cross section of those directly involved in dealing with bus service problems, particularly in rural areas. A great variety of papers were

offered dealing with all aspects of unconventional public transport operation. The publication represented one of the most comprehensive studies of the subject in the United Kingdom at the time.

2.8 STUDIES ON UNCONVENTIONAL PUBLIC TRANSPORT BY LOCAL AUTHORITIES

2.8.1 The published Public Transport Plans and Transport Policies and Programmes of Shire Counties in England and Wales, and Regional Councils in Scotland, provide valuable sources of material for the appraisal of unconventional public transport. Not only do they often contain statistics of usage of innovatory modes, but they also describe the location of services, the economics of operation and set them in the context of local transport policy.

2.8.2 The use of school vehicles by fare-paying passengers has achieved its most widespread development in Northumberland where such services have been operated since the 1968 Transport Act as **Section 30 Permit Services.** There are currently approximately 52 such services in the County, operated primarily for the movement of school children, but also available for use by fare-paying passengers (18).

2.8.3 Post bus services tend to be most highly developed in the Highland Region of Scotland. Their extent and role as well as their area of operation are fully described in the comprehensive Transport Policies and Programme of 1984 (19) and in subsequent TPPs. They have been operated there very successfully since the 1968 Transport Act. The annual TPPs of the Highland Region have been used as a valuable and up-to-date source of data on both conventional and unconventional public transport in the preparation of this dissertation. Likewise the annual TPPs for the Border Regions provide comparative information for the south of Scotland. (20)

2.8.4 The annual Transport Policies and Programmes of the Regional Councils in Scotland have thus been extensively drawn upon as an up-to-date and accurate source of material for this investigation of the role of unconventional public transport in rural Scotland.

2.8.5 The Transport Chapters of the Structure Plans of Shire County Councils in England and Wales and Regional Councils in Scotland also provide a vital source of information on local transport policy. They help to set the problems of public transport provision in the context of land use transport policy and stress the close interrelationship which prevails between land use and transport planning. The annual TPPs, referred to above are, in fact, the implementation of approved transport policies contained in Structure Plans. Useful Structure Plans which have been studied in the preparation of this thesis, as making a valuable contribution to the development of rural public transport policies, have included Cumbria, Northumberland, Durham, Staffordshire, Shropshire, Norfolk, Leicestershire, Hampshire, Devon, Cornwall, North Yorkshire, Essex, Gloucestershire, Derbyshire in England, Dyfed, Gwynedd and Clwyd in Wales and Highland, Border, Grampian, Fife, Central, Strathclyde and Dumfries and Galloway in Scotland.

2.9 STUDIES OF UNCONVENTIONAL PUBLIC TRANSPORT BY GEOGRAPHERS

2.9.1 Specifically geographical studies of innovatory public transport in Scotland have been undertaken by Farrington, Stanley and Bain of the Department of Geography of the University of Aberdeen. Their "Public Transport and Accessibility in North West Sutherland" was the subject of a Monograph in 1982 (21). This Study, besides focusing on the network

of conventional bus and rail services, also considers the role of post bus services, the use of school vehicles by fare-paying passengers and the potential for the operation of multi-functional vehicles carrying both passengers and parcels.

2.9.2 Similar, but now historic, studies were made of Public Transport in Skye and Lochalsh by the same authors in 1978. (22) These investigations of rural public transport provision and operation also considered the potential for innovatory transport in remote districts of Scotland.

2.9.3 Other possible but now historic sources of data on the subject include Farrington, Stanley and McKenzie (1981). (23) This study also discusses the role of unconventional public transport such as post bus services in meeting the transport needs of the predominantly rural areas of Easter Ross and the Black Isle.

2.9.4 A comprehensive study of the rural transport problem, which also considered the potential role of innovatory modes of public transport was undertaken to Moseley in 1977 (24). The function of unconventional public transport (including postbus services and community bus services as well as dial-a-ride as a supplementary facility) was fully discussed and their role recognised. The study was undertaken with special reference to East Anglia, a typical rural area in lowland England with a spatially disposed settlement pattern, relatively high levels of car ownership and a deteriorating network of conventional bus services. The lessons learnt in East Anglia concerning the role of unconventional public transport can usefully be applied to selected rural areas of Scotland such as the Borders Region where geographical isolation and remoteness are not a serious physical problem.

2.9.5 Other studies of the role of innovatory public transport, from a geographical perspective have included works by Bailey (1979) (25), Turnock in 1977 (26), Munton in 1971 (27), White in 1976 (28), Cloke in 1985 (29), Halsall and Turton in 1979 (30), Knowles in 1985 (31) and Nutley in 1988 (32). In general, geographers have tended to concentrate on the social and economic effects of the contraction of the conventional bus network, particularly since 1953 (the year of peak stage vehicle mileage nationally) and the role of alternative public transport systems in helping to plug gaps in this network. They do not tend to discuss the economics of bus operation in any detail, unlike studies by the Transport and Road Research Laboratory, although they do recognise the importance of central and local government (County and Regional Councils) as formulators of public transport policy. They have also tended to ignore as "non-geographical" the operational advantages of different modes of transport in terms of their seating capacity, flexibility and operating costs. The political dimension, in terms of changing legislation dealing with public passenger transport, culminating in the Transport Act 1985 discussed above, has however, received well-deserved recognition in geographical studies of the subject.

2.10 OVERSEAS INTEREST IN THE ROLE OF UNCONVENTIONAL PUBLIC TRANSPORT

2.10.1 In assessing the development of unconventional modes outside of the United Kingdom, it must be appreciated that the legislative framework for public transport in Britain is unique and not necessarily applicable to West European countries or the United States. This legal framework has already been discussed in a previous section which has demon-

strated how changing central government in Britain has been reflected in the evolution from a planned public transport system under Labour Administrations to a generally unplanned "laissez faire" style of operations under Conservative Governments, culminating in the Transport Act 1985.

2.10.2 However, although quantity control has varied with different governments, quality control reflected in high safety standards applied to both operating staff and their vehicles, has remained consistent. Thus even under the present Conservative Transport Act 1985, although every effort is made not to inhibit competition between operators, nevertheless strict standards of public safety are applied to protect the travelling public. There is no equivalent legislation to the 1985 Transport Act in West European countries where the legislative context of bus service development is different. Thus the examples quoted below of innovatory public transport in Western Europe and the United States are not necessarily comparable with those in Britain. Nevertheless, it is interesting to note how many West European countries have appreciated the significant role which unconventional modes of public transport can play.

2.10.3 Of the studies of unconventional transport written in English it seems that they have reached their greatest expression the United States. An example is Adams (1981) on the use of rural mail delivery services for passenger transport (33). This study recognises that although rural areas have a growing need for public transport, service levels continue to decline due to high operating costs and diminishing subsidies. Therefore it concludes that the combination of mail delivery with passenger movement can achieve significant operating economies.

2.10.4 In 1975 Orski published his study of paratransit (shared use of a vehicle) in the United States and Canada. He describes 100 paratransit services and demonstrates their role in areas without regular, conventional bus services (34). A further description of subsidiary public transport services and how they can be integrated with existing conventional services is contained in Perloff and Connell's papers (1975). (35)

2.10.5 Another significant study of paratransit in the United States is that of Roos and Alschuler (1975) (36). This paper describes how paratransit services bridge the gap between conventional bus services with a fixed route and fixed stopping points and the flexibility and freedom of travel by automobiles. Paratransit services are attuned to meet the demand of users and their need to travel from dispersed rural settlements to nucleated urban centres. The paper described how the use of multi-functional vehicles can be integrated with the network of conventional buses with fixed routes and can provide an extension of the latter. However, it concludes that paratransit services tend to be fragmented and need to be co-ordinated with each other and with conventional bus services. An overall transport authority to achieve an integrated public transport system in the United States is lacking.

2.10.6 Further examples of experimental public transport in the United States ranges from car sharing arrangements (37), the use of subsidised taxi services (38) to the development of "subscription bus services", whereby travellers hire or rent a vehicle on a daily or short-term basis and operate it themselves (39) and Dial-a-Ride (40) (41).

2.10.7 The potential for the development of experimental public transport has also been recognised in several Western European countries where innovatory schemes

have been launched to supplement the existing public transport network. Three such schemes operating in West Germany (Friedrichshafen) and the Netherlands (Delft), which provide demand-actuated public transport, are described by Breur and Verdonck (42). In each case the route of the bus is determined by the requests of passengers and can be altered and adjusted to meet changing demand. A variation on this scheme, using taxi cabs in a rural area (with 1,000 inhabitants) of Norway, is described by Froysadal (43).

2.10.8 The possibility of integrating public and school transport in the context of Hohenlohe, West Germany is explored by Fausch (44). The conclusion reached is that such integration can achieve significant saving in operating costs, provided the co-operation of the Local Education Authority can be gained.

2.10.9 The nature of the rural transport problem in Norway, where public transport continues to be heavily subsidised despite rising levels of car ownership, is discussed by Knowles (45). The use of public transport continues to increase (contrary to the experience of all other north and West European countries). This has been due to a policy of retaining the integrity of the public transport network by subsidy (from both central and local government). The use of multi-functional vehicles, carrying different types of traffic as well as passengers in the rural areas, has also contributed to the continuing popularity of public road passenger transport. A similar study of public transport in Sweden by White concluded that a fairly intensive rural bus network can be maintained even in conditions of high car ownership provided that public transport is co-ordinated and a two-tier

system of trunk and feeder bus routes (supplemented by unconventional modes) is developed (46).

2.10.10 A study by Kihlman in Sweden in 1982 is a literature survey of the provision of bus routes and paratransit (the use of dual purpose vehicles) in rural areas. The problems of setting up a paratransit system are discussed in the context of other foreign paratransit experiments in rural areas (47).

2.10.11 A Dutch example of the adaptation of the existing public transport fleet to accommodate the disabled is contained in Lombaers monograph for the University of Delft (48). This research considered the modifications required in the design of public buses operating in rural areas for better accessibility to users of wheelchairs. It reflects a growing recognition of the need to adapt public service vehicles to meet the requirements of the disabled element of the population who may wish to also use them.

2.10.12 Examples of innovatory public transport in developing countries are considered by Walters in his study of the use of minibuses in Kuala Lumpur where unconventional modes can be operated without the legal restraints concerning the safety of vehicles and the professional competence of drivers which prevail in the United Kingdom (49). This is an ideal environment for the bus or taxi operator who can run his service where and whenever he likes, regardless of the condition of his vehicle.

2.11 CONCLUSIONS

2.11.1 The above review of literature dealing with innovatory public transport will have demonstrated the widespread interest in the subject in the United Kingdom, the United States and Western Europe. The great variety of unconventional modes of public transport which are encountered internationally has

been summarised by May in Table 2.1 (50). This table also lists the different characteristics of each innovatory form of public transport including the type of route operated, the vehicle capacity and the type of area of operation. These examples have been taken from different parts of the world, but mainly from the United States and Western Europe. They can function as supplementary services to conventional bus and rail services or they may operate independently. Most of these examples have been described in the above literature review.

2.11.2 However, as previously stated, Britain is unique in its public transport legislation and solutions to the rural transport problem which have been achieved elsewhere are not necessarily applicable to the United Kingdom. This statement applies particularly to transport safety in that strictly enforced legislation to maintain adequate safety standards for drivers and vehicles might preclude some experimental schemes which would be permitted in Western Europe and the United States where more liberal laws concerning traffic safety prevail.

2.11.3 Another factor which should be appreciated is that many of the studies of the subject in the United Kingdom, described above, are now historic and out of date. They have characteristically referred to small, localised and scattered rural areas. These piecemeal studies have tended to assess the characteristics of individual schemes. They generally pre-date the enactment of the Transport Act 1985 and the de-regulation of bus services which has had a dramatic effect on levels of public transport provision.

2.11.4 The time is, therefore, opportune for a comprehensive study and a fresh look at the problems and achievements of the operation and planning of innovatory public transport in rural Scotland since

TABLE 2.1. UNCONVENTIONAL PUBLIC TRANSPORT.

	ROUTE	STOPS	SCHEDULE	BOOKING	FARE	VEHICLE CAPACITY	RADIO COMMUNICATION	OCCURENCE	VIABILITY	LEGAL IN G.B.	AREA OF OPERATION	COMMENTS
0. CONVENTIONAL BUS SERVICES	fixed	fixed	fixed	no	individual	40-80	no	widespread	generally poor	yes	Urban Suburban	
1. MINI- AND MIDI-BUS SERVICES	fixed	fixed or flexible	fixed	no	individual	12-30	no	few in GB	poor	yes	Urban Suburban	much as 1, smaller vehicles
2. DEMAND RESPONSIVE BUS (a)Conventional	semi variable	some on demand	small variations	yes	individual	40-80	no	few in GB	better than 1?	yes	Suburban Rural	suited to inter-urban routes.
(b)Mini or Midi	semi variable	some on demand	small variations	yes	individual	12-30	no	some in GB (ex dial-a-bus)	generally poor	yes	Suburban Rural	possibly best suited to low-density urban areas - may have role in rural transport
3. DIAL-A-BUS	variable	on demand	variable	yes	individual	12-30	yes	few in GB	poor	yes	Suburban	door-to-door service
4. COMMUNITY BUSES	fixed	on demand?	fixed	yes?	individual	12	no	few in GB	good?	yes	Rural	organised locally with volunt drivers (arrangements may var
5. POSTBUSES	fixed	on demand	fixed	no?	individual	4-20?	no	c100 in GB	good	yes	Rural	(S30 permits or Road Service Licences)
6. SUBSCRIPTION SERVICES	according to demand	on demand	fixed (peak only)	yes	individual (season)	40-80	no	some in GB	good	yes	Line Haul	
7. TAXIS	variable	on demand	none	yes	block	4-6	yes	widespread	good	yes	Urban Suburban	door-to-door
8. SHARED TAXIS	variable	on demand	none	yes	individual	4-6	yes	some in US	good?	no	Urban	door-to-door
9. JITNEYS	semi variable	on demand	none	yes	individual	4-6	no	none in GB	good	no	Urban	
10. LIMOUSINES	semi variable	some on demand	may be fixed	yes	individual	6-10	?	some in North America	good	no	Line Haul	
11. COMMUNITY CAR SCHEMES	variable	on demand	none?	yes	?	4-6	no	several in GB	good	yes	Rural	door-to-door?
12. CAR POOL/SHARE	flexible	flexible	flexible	yes	varies	4-6	no	some in GB	good	yes	Line Haul	
13. VAN POOL	flexible	flexible	flexible	yes	individual	10-12	no	several in US	good	not for payment	Line Haul	organised by employer
14. SELF DRIVE CAR	variable	variable	variable	yes	block	4-6	no	widespread	good	yes	General	
15. PARK AND RIDE	variable	fixed	flexible	no	individual	4-6	no	several in UK	poor	yes	Line Haul	in conjunction with rail or bus service

SOURCE: A.D.MAY 1987.

the Transport Act 1985. The thesis, while recognising the contribution made by these piecemeal studies to the evolution of principles and the formulation of a philosophy for the subject, seeks to make a contemporary, nationwide appraisal of rural Scotland illustrated by detailed investigations of the Highland and Borders Regions. The latter are classic examples of predominantly rural areas of Scotland where opportunities for the development of innovatory public transport are considerable.

2.11.5 The present study, while noting the contribution of the published work discussed above in the literature review and the bibliography, will rely mainly on primary sources of data provided by the Public Transport Offices and their staff of the Regional Councils of Scotland. It will attempt to analyse previously unpublished data supplied by the Regional Councils. It will, in general, not depend unduly on secondary sources such as published books and papers outlining the work of other researchers to any great extent, since many of these published sources are now greatly out of date and have been superseded by events following the enactment of the Transport Act 1985. The aim, therefore, will be to take a fresh look at the subject in the context of the aftermath of the Transport Act 1985, using contemporary data, including the recently published 1991 census of population.

2.11.6 Finally, the pattern and use of unconventional public transport in rural Scotland are constantly changing. It will be the aim of the writer to provide an up-to-date geographical analysis of this pattern which makes use of recently available sources, generally no earlier than 1991.

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CHAPTER THREE

THE DISTRIBUTION OF UNCONVENTIONAL PUBLIC TRANSPORT IN RURAL SCOTLAND

3.1 INTRODUCTION

3.1.1 Rural bus services in Scotland consist of a basic framework of inter-urban routes with a complex network of local services linking dispersed settlements to the main market towns and major urban centres. However, the level of service provided by this basic network cannot cover all needs. In some parts of rural Scotland unconventional public transport has been developed as a supplementary facility to fill in gaps left by the contraction of conventional bus (and rail) services. It can also function as an extension of the bus and rail network penetrating into remote and inaccessible areas which might otherwise be deprived of a public transport facility. It can also provide a supplementary service and an emergency service. Unconventional modes are endowed with a degree of flexibility which matches the convenience of the private car. They also often provide a door-to-door service which is not generally available to users of conventional modes. Unconventional public transport can also be used as a standby facility in areas with characteristically high levels of car ownership, but where the family car may not be available to the rest of the family during the week because it is being used by the head of the household for the daily journey to work. Thus, households which have only one car can be equally dependent upon the availability of some form of public transport as non-car owning households.

3.2 THE DISTRIBUTION OF UNCONVENTIONAL MODES

3.2.1 In rural Scotland unconventional public transport was represented by the following modes in 1992-93.

1. Postbus services.
2. Community bus services.
3. Voluntary social car schemes.
4. Dial-a-ride services.
5. Other car sharing arrangements.
6. School services used by fare paying passengers.

3.2.2 In each of the above cases, emphasis has been placed on unconventional modes which are actively supported or materially subsidised by the Regional Councils concerned, for the reasons stated in Chapter 1, which defined the aims and objectives of the thesis.

3.2.3 As a first step, it was necessary to ascertain the geographical distribution of the above defined unconventional modes of public transport throughout mainland Scotland. The results of this survey are summarised in Figure 3.1 and Table 3.1 which identifies supported schemes by Regional Councils (see Appendix A for survey form).

3.2.4 Table 3.1 shows that in 1992-93 there was a total of 82 supported postbus services, 12 community bus services, 9 supported voluntary social car schemes, 13 dial-a-ride schemes, 5 other car sharing arrangements supported by the Regional Council concerned and 173 school contract bus services which are also available for use by fare-paying passengers.

3.2.5 It is evident from Figure 3.1 which shows the geographical distribution of these schemes throughout mainland Scotland, that this complex pattern of distribution is more closely related to the public transport policy of the Regional Council concerned rather than purely to geographical factors such as settlement distribution, population density, remoteness and inaccessibility. Car availability is another critical factor determining this distribution. For example, Borders Region which has a

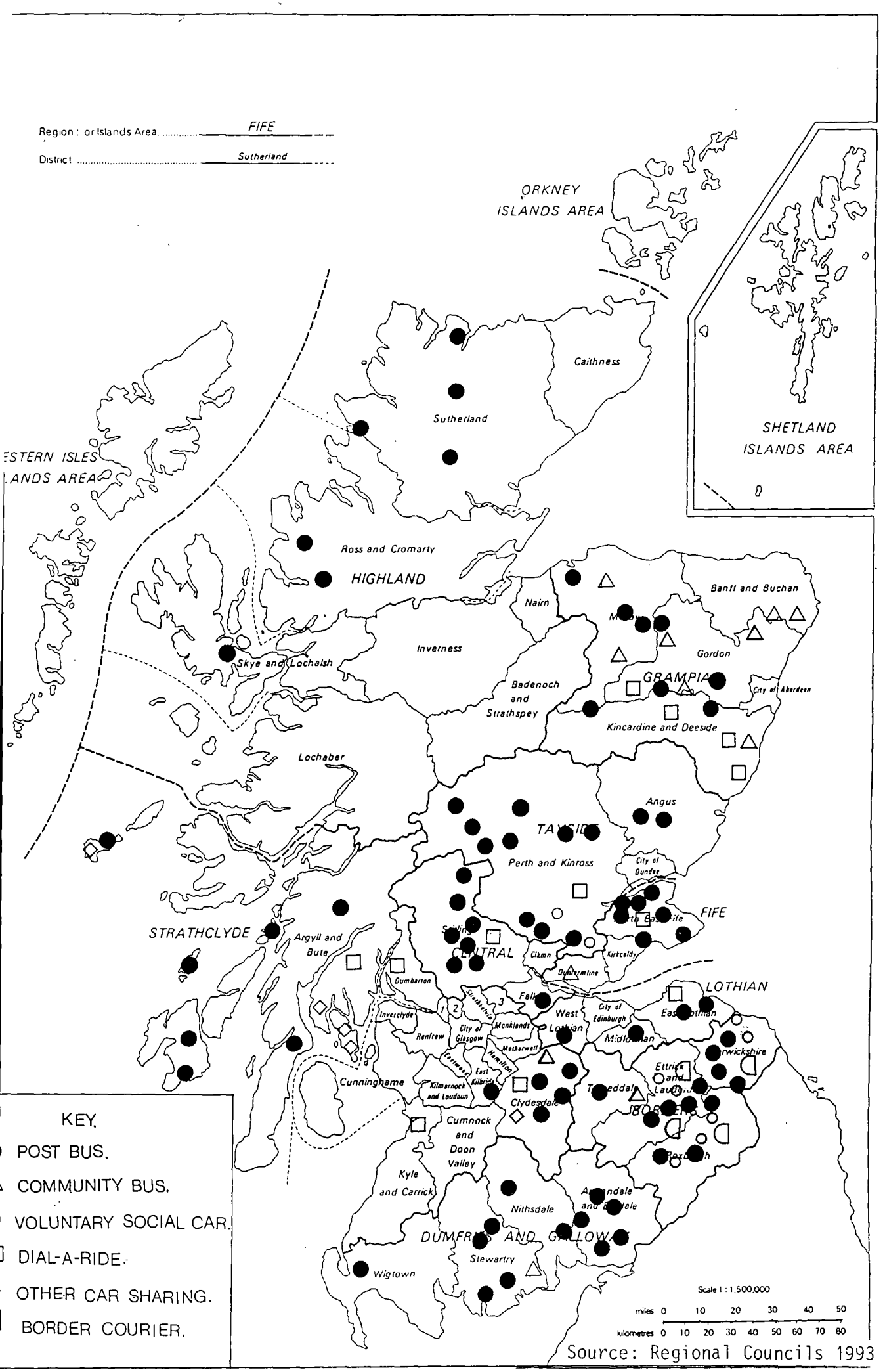


FIGURE 3.1 MAINLAND SCOTLAND - DISTRIBUTION OF SUPPORTED SCHEMES.

TABLE 3.1 DISTRIBUTION OF UNCONVENTIONAL PUBLIC TRANSPORT IN RURAL SCOTLAND

NUMBER OF SCHEMES 1992-93 SUPPORTED BY THE REGIONAL COUNCILS

REGION	Post bus service	Community bus	Voluntary social cars	Dial-a-ride	Other car sharing	School services used by fare paying passengers
BORDERS	12	1	7	0	0	26
CENTRAL	8	0	0	1	0	6
DUMFRIES & GALLOWAY	12	1	0	0	0	0
FIFE	7	1	0	1	0	0
GRAMPIAN	8	8	0	4	0	72
HIGHLAND	7	0	0	0	0	44
LOTHIAN	4	0	0	2	0	0
STRATHCLYDE (RURAL)	12	1	0	4	5	25
TAYSIDE	12	0	2	1	0	0
TOTAL MAINLAND SCOTLAND	82	12	9	13	5	173

Source: Authors survey of Regional Councils 1992-93

very progressive public transport section in its Regional Council has opted for a variety of experimental schemes, compared with Highland Region (a classically remote area) where emphasis has been placed almost exclusively on postbus services. Other innovative modes have not been developed.

3.2.6 A critical factor influencing this distribution is the level of car ownership. Figure 3.2 and Table 3.2 show the percentage of households with no car in mainland Scotland, using 1991 census data. They reveal that the lowest levels of car ownership (over 40% of households without a private car) are concentrated in the predominantly urbanised Regions of Lothian, Strathclyde and Tayside. In the mainly rural Regions of Borders, Dumfries and Galloway, Grampian and Highland, less than one third of households are non-car owning. Central Region and Fife Region lie intermediate between these two extremes.

3.2.7 The percentage of households which are non-car owning, as tabulated above, both causes and reflects the dependence of the local population on public transport services. However, unconventional modes of public transport have an important role to play as a standby facility even in areas of high car ownership. Nevertheless, it is immediately evident from Table 3.2 that the remoter rural Regions enjoy the highest levels of car ownership. Borders Region records the highest level of car ownership in mainland Scotland (0.39 cars per person) and Strathclyde the lowest (0.27 cars per person).

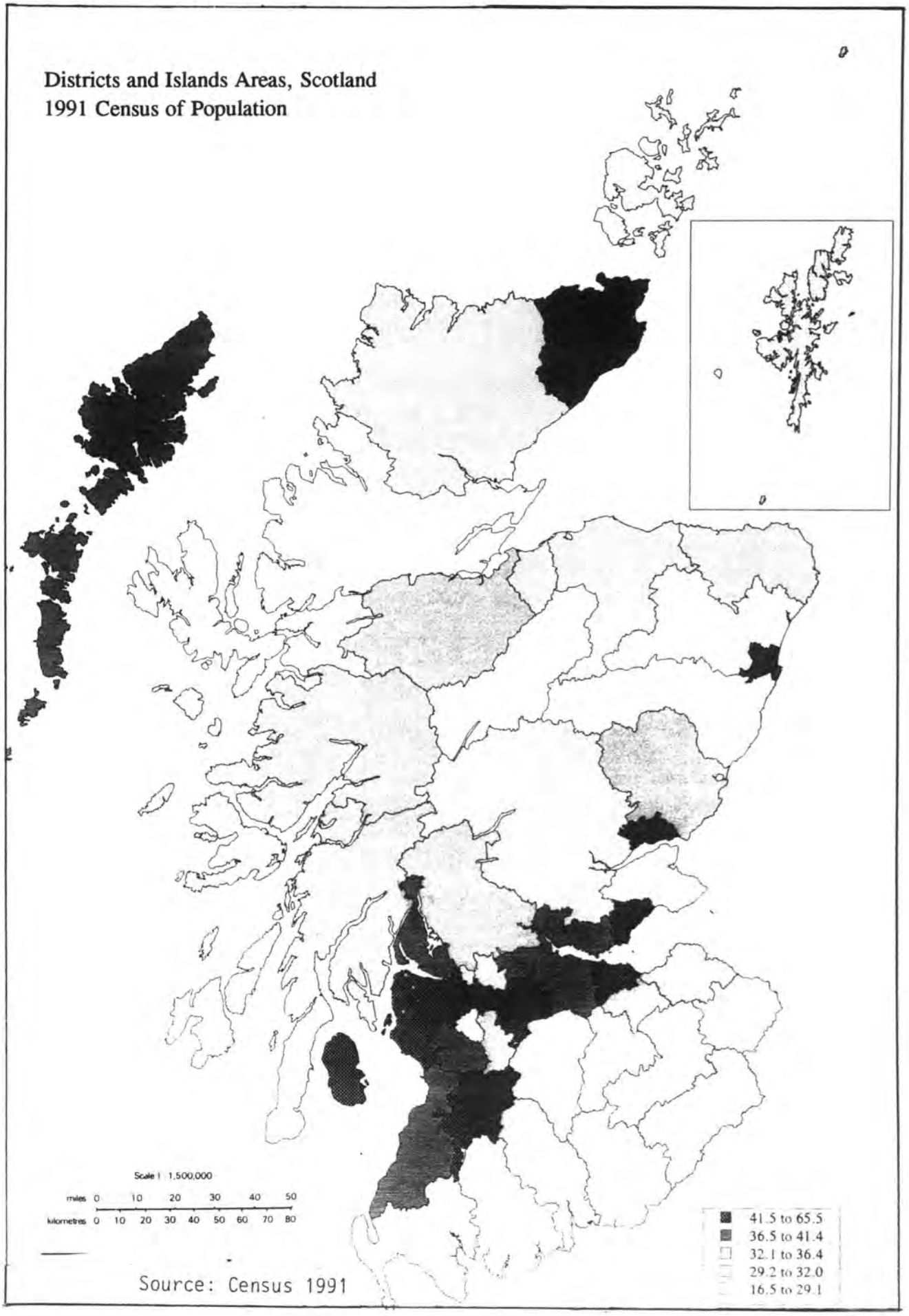


FIGURE 3.2 SCOTLAND:PERCENTAGE OF HOUSEHOLDS WITH NO CAR 1991

TABLE 3.2

CAR AVAILABILITY BY REGION IN MAINLAND SCOTLAND 1991

Region	Total	No car	% No car	Cars per person
Borders	43,243	13,574	31.4	0.39
Central	105,793	39,643	37.5	0.34
Dumfries & Galloway	59,070	18,131	30.7	0.37
Fife	137,041	51,486	37.6	0.34
Grampian	200,292	63,531	31.7	0.38
Highland	79,212	24,919	31.5	0.36
Lothian	304,382	129,355	42.5	0.32
Strathclyde	903,339	444,554	49.2	0.27
Tayside	160,645	66,603	41.5	0.33
Total Scotland	2,020,050	860,444	42.6	0.31

TABLE 3.3

NON-CAR OWNERSHIP BY PENSIONER HOUSEHOLDS BY REGION IN MAINLAND SCOTLAND.

	Pensioner households	
Region	Total	% with no car
Borders	16,012	50.5
Central	33,923	59.8
Dumfries & Galloway	21,567	45.7
Fife	45,659	61.0
Grampian	60,891	54.7
Highland	25,653	47.9
Lothian	95,669	64.1
Strathclyde	297,740	67.7
Tayside	56,054	59.3
Total Scotland	662,919	62.3

Source: Census 1991.

3.3 THE VULNERABILITY OF THE ELDERLY

3.3.1 In 1991 there were 662,919 households with at least one pensioner in Scotland. Of this total, 62.3% were without a private car. The distribution of non-car owning pensioner households by Region in mainland Scotland is tabulated below in Table 3.3 and shows low levels of car ownership in mainly urbanised Regions. In general it is the elderly person without private transport who is most vulnerable to the loss or absence of a public transport system.

3.3.2 It is evident that more than half of householders with a pensioner in eight of the nine Regions of mainland Scotland are without private transport. In Scotland as a whole, a total of 412,999 pensioner households were non-car owning. This figure reflects the scale of the problem of the elderly who are deprived of a private car and are completely dependent upon the public transport system. It also illustrates the vulnerability of many pensioner households to any further contraction of conventional bus and rail services. Unconventional public transport can thus provide an alternative mode of transport in areas with a deficiency in conventional modes. Figure 3.1 has shown which Regional Councils are developing innovative transport as a lower cost, more flexible alternative in remoter rural areas where the market for public transport is small and spatially dispersed. In such areas remoteness, a dispersed settlement pattern and the physical geography of the area may make conventional bus services costly in operate, providing a further incentive for experimentation.

3.3.3 All of the innovative modes described above in Para 3.2.1 and illustrated in Figure 3.1 and Table 3.1 can be used by the non-car owning elderly to gain access to facilities in local urban centres. It is

obvious that different Public Transport Officers have emphasised different aspects of unconventional transport in the region. For example, the Highland Region has placed strong reliance on postbus services, Grampian Region on dial-a-ride schemes and the Borders Region on the use of multi-functional vehicles to convey both passengers and parcels in the form of their Border Courier services. All of the Regional Councils are committed to improve levels of accessibility in their rural areas in their approved Transport Policies and Programmes. The use of such experimental schemes can often provide the Regional Council with a low cost alternative to subsidised conventional bus services.

3.3.4 It is also interesting to note that there has been no sharp increase in car ownership among pensioner households in Scotland during the intercensal period 1981-91. The percentage of non-car owning households among the elderly declined only slightly during this period from 68.6% in 1981 to 62.3% in 1991. Thus taking Scotland as a whole, almost two thirds of households containing a pensioner are still without a car. This is a reflection of a continually aging population, but also of low incomes and physical disability, which prevails among the elderly, preventing them from affording a car or driving it even if they possess one. Unconventional public transport can often provide almost a door-to-door service for such deprived households compared with the relative inflexibility of bus and rail services which are confined to a fixed route with fixed stopping points.

3.4 A DESCRIPTION OF UNCONVENTIONAL MODES BY REGION

3.4.1 There follows a brief description of the number and type of unconventional public transport modes in

each region of mainland Scotland, using data gathered by the author from each Regional Council.

A. Predominantly Rural Regions - Borders, Dumfries and Galloway, Grampian and Highland

1. Borders Region

3.4.2 The Borders Region possessed a well integrated network of unconventional public transport services in 1993, largely due to the initiative of the progressive Public Transport Section of the Regional Council. These unconventional modes function as supplementary to the network of conventional bus services. The Region no longer had any passenger rail services following the contraction of the rail network in the 1960s. Thus experimental schemes fulfil a vital role for the conveyance of passengers in parts of the Region which would otherwise be deprived of public transport. The network of conventional and unconventional modes are knit closely together to form a fully co-ordinated and integrated public transport system.

3.4.3 Few categories of unconventional modes are represented in the Region. There are 12 postbus services, one community bus service, and seven voluntary social car schemes. The Border Courier Service now operates over four routes throughout the Region. In addition the Regional Council allows 26 school contract services to be available for use by fare paying passengers. There are no scheduled dial-a-ride services supported by the Regional Council, but accessible Council vehicles are made available to a number of groups to enable them to provide for the needs of the elderly. There are eight examples of this throughout the Region.

3.4.4 The Borders Regional Council is committed in its annual Transport Policy and Programme to continue to support a variety of unconventional services. (1)

These services, outlined above, reach communities where commercial conventional bus services are not viable. They also operate at a lower cost than conventional services. Taken together, unconventional schemes enable travellers to undertake a wide range of journeys for different purposes to different destinations and at different times of day.

2. Dumfries and Galloway

3.4.5 Dumfries and Galloway Regional Council supports 12 postbus services, one community bus service, but no voluntary social car schemes or dial-a-ride schemes. There are also no examples of other car sharing arrangements supported by the Regional Council. Thus innovative transport is less well developed than in the Borders Region. In most cases the reason for this deficiency may be a less progressive Public Transport Section and a greater reliance on conventional bus services. Surprisingly, there are no formal arrangements to make educational contract services available to adult fare-paying passengers.

3.4.6 The Regional Council is committed in its approved Transport Policies and Programme to a policy of "Access for All". To achieve this overall strategic objective, it recognises that initiatives such as community minibuses and voluntary car schemes can complement the conventional network of bus services. Help and advice are offered to groups involved in establishing or operating these schemes. (2) The Regional Council has recently provided a grant to Thornhill and District Age Concern towards the purchase of a minibus for the new community bus service mentioned above. An important element in this "Access for All" strategy continues to be the reliance on public transport including the development of innovative rural transport. The need for an

adequate public transport service to meet the needs of a geographically dispersed and remote rural population, using innovative modes of transport, if necessary, has long been recognised by the Regional Council (3). It continues to work for improved accessibility of rural areas.

3. Grampian

3.4.7 Grampian Region has a well developed network of unconventional public transport arrangements which receive the full support of the Regional Council. These include 8 postbus services, 8 community bus services and (fairly uniquely) 4 dial-a-ride services as well as 72 school contract transport services which are also available for use by adult fare-paying passengers. However, there are no supported voluntary social car schemes or other car sharing arrangements at the present time.

3.4.8 A feature of unconventional public transport in Grampian is the presence of four Dial-a-Ride schemes, known locally as "66655 Specials". These operate in the Banchory, Stonehaven, Deeside, and Kincardine areas. The service is provided primarily for elderly and disabled people with special facilities for wheelchairs, but is also available for use by local residents. In order to travel, the passenger must reserve a seat by phoning Stonehaven 66655. The service is flexible and matches the convenience of the private car, the route being adjusted to meet daily variations in demand and to pick up pre-booked passengers. The four Dial-a-Ride schemes operate over a total of 24 routes, mainly in the east and southeast of the Region. It has been described as "the caring bus service for elderly and disabled people" (4).

3.4.9 The importance of transport provision in rural areas of Grampian and other Scottish Regions has been

highlighted by the Convention of Scottish Local Authorities Report entitled The Measurement and Analysis of Rural Deprivation, commissioned in mid 1989. (5) The report revealed that there is a clear pattern of service underprovision in rural Scotland, including the Grampian Region. The study clearly states that amongst the issues consistently raised by local inhabitants of Grampian and elsewhere as posing a serious problem, transport provision proved to be particularly important. The report indicated that transport is central to the problems of deprived groups in rural Scotland. All the communities visited throughout the course of this study referred to the unhelpful effect of the deregulation of public transport services. The report has also stated that, with transport an essential factor in access to services and the problems of access exacerbated by the tendency towards the centralisation of Local Authority and other public services, heavy reliance is placed on the goodwill of volunteers if community transport is to be developed.

4. Highland

3.4.10 The Highland Region relies almost exclusively on postbus services, supplemented by 44 school contract services available for use by adult fare-paying passengers. Seven of the postbus services were supported by the Regional Council in 1992-93 and operate throughout the Region. They invariably act as extensions of the rail network or of conventional bus services and frequently operate from railheads or bus termini. There were no examples of supported Community Bus Services, Voluntary Social Car Schemes, Dial-a-Ride or other supported car sharing arrangements in the Region in 1992-93. This emphasis on the use of postbus services and almost

complete absence of other unconventional modes appears to be a characteristic of the Highland Region. Postbus services are frequently operated in tandem with school bus services with the result that most remote rural communities enjoy a combined service of two return journeys daily into the local urban centre on weekdays throughout the year (excluding school holidays). Thus most rural settlements in the Highland Region of over 50 population have a basic minimum service of at least one return journey daily or two return journeys if the settlement is also served by a school bus. This basic minimum service compares very favourably with the level of bus service enjoyed by rural settlements in several rural Shire Counties of England. (6)

3.4.11 The emphasis on postbus services is a deliberate policy decision of the Regional Council who enjoy an excellent working relationship with the Post Office at Inverness. The Regional Council is committed in its Transport Policies and Programme to endeavour to sustain public transport throughout the Region at a level to meet the basic needs of the population and is using the postbus as a tool to overcome the inaccessibility of its remoter rural areas. (7)

3.4.12 The Regional Council recognises the supplementary role of postbus services which are particularly useful in sparsely populated areas where numbers of users are so small that no orthodox bus service could survive except through unreasonably heavy contract payments. In summary, the Council's policy is to co-operate with the Post Office in optimising the use of postbuses and throughout the Region. (8)

B. Semi-Rural Regions - Strathclyde, Tayside and Lothian, Fife and Central

1. Strathclyde

3.4.13 Strathclyde Region, which includes the heavily congested, urbanised area of Glasgow and Clydeside also incorporates extensive rural tracts characterised by a spatially dispersed settlement pattern, low population density and physical isolation and remoteness. In 1992-93 the rural areas of this Region were served by 12 postbus services, one community bus service, 4 dial-a-ride bus services, 5 other car sharing arrangements (shared taxi schemes) supplemented by 25 school contract services which were available for use by adult fare-paying passengers. All of these supported unconventional modes were operated in otherwise inaccessible parts of the Region geographically distant from the major urban areas. Their exact distribution is shown in Figure 3.1. There are currently no voluntary social car schemes supported by the Regional Council in Strathclyde.

3.4.14 Strathclyde Regional Council is currently considering several public transport initiatives in rural areas to enlarge and supplement the above experimental schemes, within the constraints imposed by the Transport Act 1985. These include the further expansion of the postbus services, the greater use of school transport by adult fare-paying passengers and another dial-a-bus service. Application is being made for Rural Transport Innovation Grants from the Scottish Office to finance these several rural public transport initiatives. Improved interchange between unconventional modes and conventional bus services and rail services is also currently being examined, eg at Oban. Discussions are also continuing with the Roads Department (Internal Transport) on extending the use of Regional Council vehicles for use in mainstream school transport and as subsidised local bus services (9).

3.4.15 The Regional Council report that they are involved in consultations with representatives of rural communities with a view to developing more community transport in order to contribute to the relief of rural deprivation. Inaccessibility has been recognised as a major cause of deprivation and the greater use of unconventional public transport to improve the mobility of the rural community is being actively investigated. However, shortage of finance remains a problem in implementing these proposals (10).

2. Tayside

3.4.16 Tayside is a semi-rural Region with a mixture of rural and urban settlements. Nevertheless it had 12 supported Postbus Services, two voluntary social car schemes, and one dial-a-ride service in 1992-93. However, the Region supports no community bus services or other car sharing arrangements at the present time. The Region relies on scheduled conventional bus services for the movement of schoolchildren and in 1992-93 had no school contract vehicles which were also available to fare-paying passengers.

3.4.17 It is the stated policy of Tayside Regional Council that where bus service provision is low and adversely affects the mobility of local residents, a detailed study will be made with a view to improving service provision and encouraging greater use of public transport. Following a "Rural Link" exercise in highland Perthshire during the summer of 1988, a number of innovatory minibus services were introduced in response to comments received from the public. Elsewhere in Tayside full advantage has been taken of the Rural Tansport Innovation Grant Scheme to provide rural services for specific identified needs (11).

3.4.18 Rural decline and de-population are issues of major concern to the Regional Council in formulating its strategic planning policies. The mobility of the rural population is regarded as a key issue in influencing the degree of accessibility to employment, housing, shops and services, such as medical care and schools. Unconventional public transport is seen as a contributory means of achieving access to these centralised facilities. In 1992/93 some £80,000 was allocated to the public transport budget for "special needs" transport (12).

3. Lothian

3.4.19 Lothian Regional Council, with many urbanised areas, nevertheless supports four postbus services, and one dial-a-ride scheme, but no community bus services, no voluntary social car scheme and no other car sharing arrangements. The four supported postbus services tend to operate in the predominantly rural sector in the east of the Region around Dunbar and Oldhamstocks(?) and Haddington.

3.4.20 The one dial-a-ride scheme known as "handicab" serves the whole of the Lothian Region. It is a dial-a-bus service, semi-scheduled and aimed at meeting the need for occasional shopping trip by the rural population throughout the Region. Contracts let by the Department of Education are all private hire arrangements which do not carry passengers at separate fares. All other school services are "conventional" registered services used by both scholars and the general public.

4. Fife

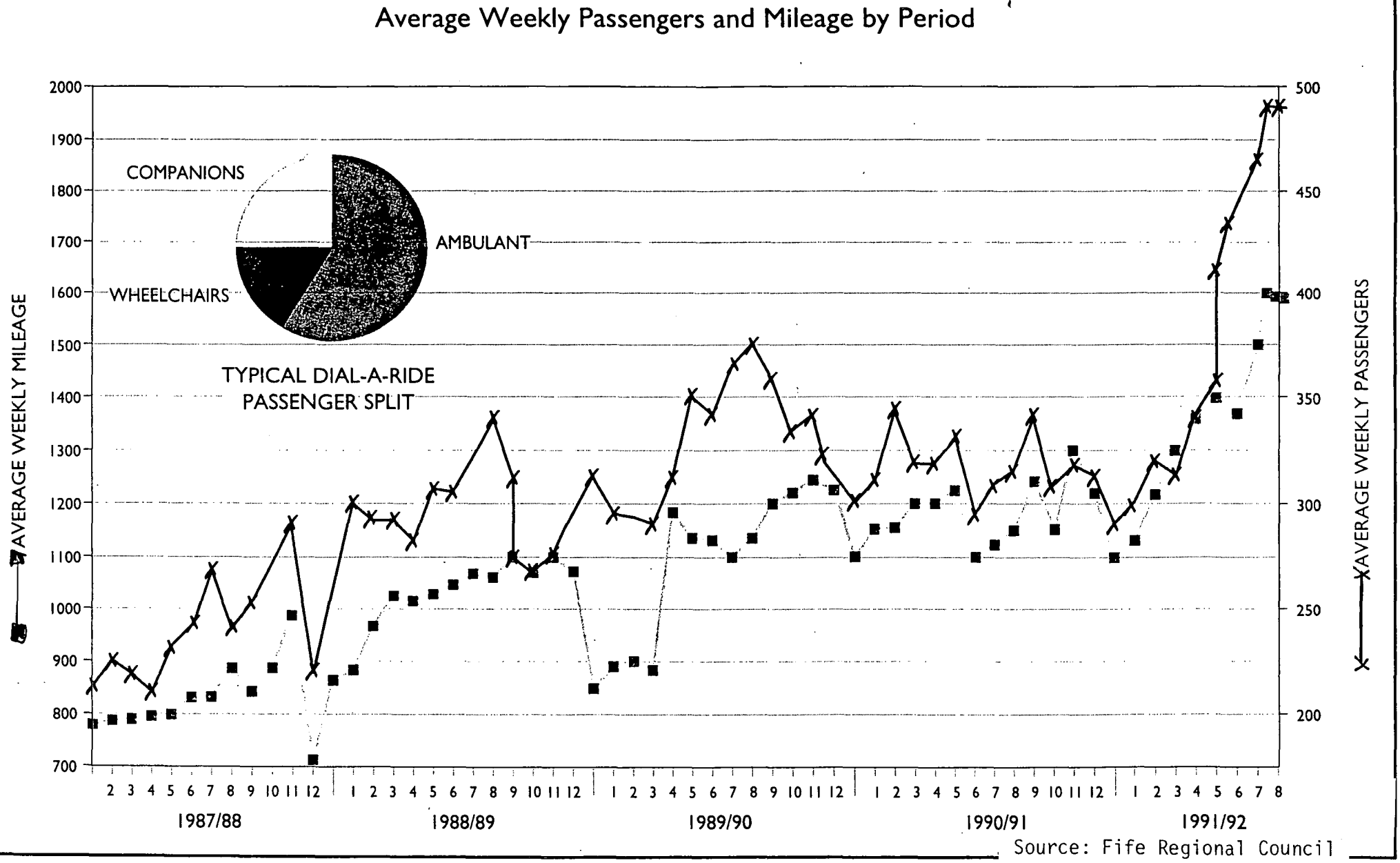
3.4.21 Fife Region, which is also a semi-rural Region, supports seven postbus services, one community bus service, no voluntary social car schemes, one Region-wide dial-a-ride scheme, but there are no

other supported car sharing arrangements. The postbus services tend to be widespread in the Cupar and Anstruther areas of Fife. The one community bus operates in West Fife in the Valleyfield area.

3.4.22 The dial-a-ride service offers semi-scheduled shopping trips on at least one day per week. It is a free service operated directly by Fife Regional Council and utilising five accessible minibuses. Figure 3.3 shows patronage and mileage of the service during an average week and may be regarded as typical of this type of transport. Seasonal variations in patronage are very evident with the service being underutilised in winter. However, there are also sharp fluctuations in the use of the service from week to week reflecting the intermittent nature of demand. There was a notable rise in patronage in 1991/92.

3.4.23 The Regional Council is committed in its annual Transport Policies and Programme to integrate, as far as practicable, school transport with the local service network so as to provide a cost-effective school transport operation, without prejudice to safety and educational needs. It is also bound to encourage, where appropriate, the use of unconventional transport modes, including operations such as "hail and ride", where appropriate (13). Most community transport organisations in Fife provide a service geared specifically towards the disabled or those with special needs. There are no community transport organisations providing regular, scheduled services which are also available for use by the general public and are hence within the terms of reference of this thesis.

5. Central



Source: Fife Regional Council

3.4.24 Central Region has eight supported postbus services scattered throughout the Region, but mainly in the Callander area. There are no community buses operating under a community bus permit at present, although the Regional Council is examining the possibilities of expanding this mode.

3.4.25 The Public Transport Section of the Regional Council does not currently provide financial support to any voluntary car schemes, although it is available to provide advice and information. Bids for money to spend on community transport initiatives have so far been "turned down", but this type of support, particularly for rural areas, is an integral part of the Region's Transportation Strategy - "All Change" (14).

3.4.26 There is one supported dial-a-ride scheme called "Dial-a-Journey" which operates throughout the Region. There are no other supported car sharing arrangements. Additional funding from the Regional Council in 1991 enabled the "Dial-a-Journey" service to extend its door-to-door services to cover the entire Region. (Western rural areas had previously been excluded.) Only about six services operating into Callander carry adult passengers on a regular basis as well as scholars.

3.4.27 The Regional Council will encourage and actively promote more journeys by bus through support for community transport initiatives and the provision of flexibly-routed, accessible bus services from rural areas to hospitals (15). This is a firm commitment.

3.5 CONCLUSIONS

3.5.1 This survey of the distribution of supported unconventional public transport has identified a total of 82 postbus services, 12 community bus services, 9 voluntary social car schemes, 13 dial-a-ride services, 5 other supported car sharing arrangements

and 173 school services which are also available for use by adult fare-paying passengers in rural mainland Scotland. The emphasis placed on each of these experimental schemes varies from Region to Region. The popularity of specific services has been found to be dependent upon the initiative and forward planning of the Public Transport Section of each Regional Council rather than the geographical character of each Region.

3.5.2 The innovative services, described above, provide a locally valuable facility which supplements the network of conventional bus and rail services and frequently competes, in terms of flexibility and convenience, with the private car.

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CHAPTER FOUR

CASE STUDIES OF THE HIGHLAND REGION AND THE BORDERS REGION - THEIR POSITION AND GEOGRAPHICAL CHARACTER AS A MARKET FOR UNCONVENTIONAL PUBLIC TRANSPORT

4.1 INTRODUCTION

4.1.1 It is proposed to undertake case studies of two geographically separate and contrasting regions to illustrate the problems and potential for the development of unconventional public transport in rural Scotland. These are:-

1. The Highland Region
2. The Borders Region.

4.1.2 These two Regions are located in the extreme north and the southeastern extremity of Scotland respectively. They demonstrate contrasting markets for unconventional public transport in different rural areas of Scotland, measured in terms of their physical geography, settlement pattern, population density and distribution, public transport network and level of car ownership. The location of these two contrasting and physically different Regions within mainland Scotland is shown in Figure 4.1.

4.1.3 The choice of complete Regions, rather than dispersed small areas, to illustrate the different roles of unconventional public transport was deliberate in that it was found that data on the pattern of operation and usage of unconventional modes was more readily available from the Regional Councils concerned. The reorganisation of local government in Scotland, is currently (1994/95) being discussed in Parliament. Its implications for public transport policy and operation will be assessed in a later chapter (Chapter 11).

4.2 POPULATION DENSITY AND DISTRIBUTION

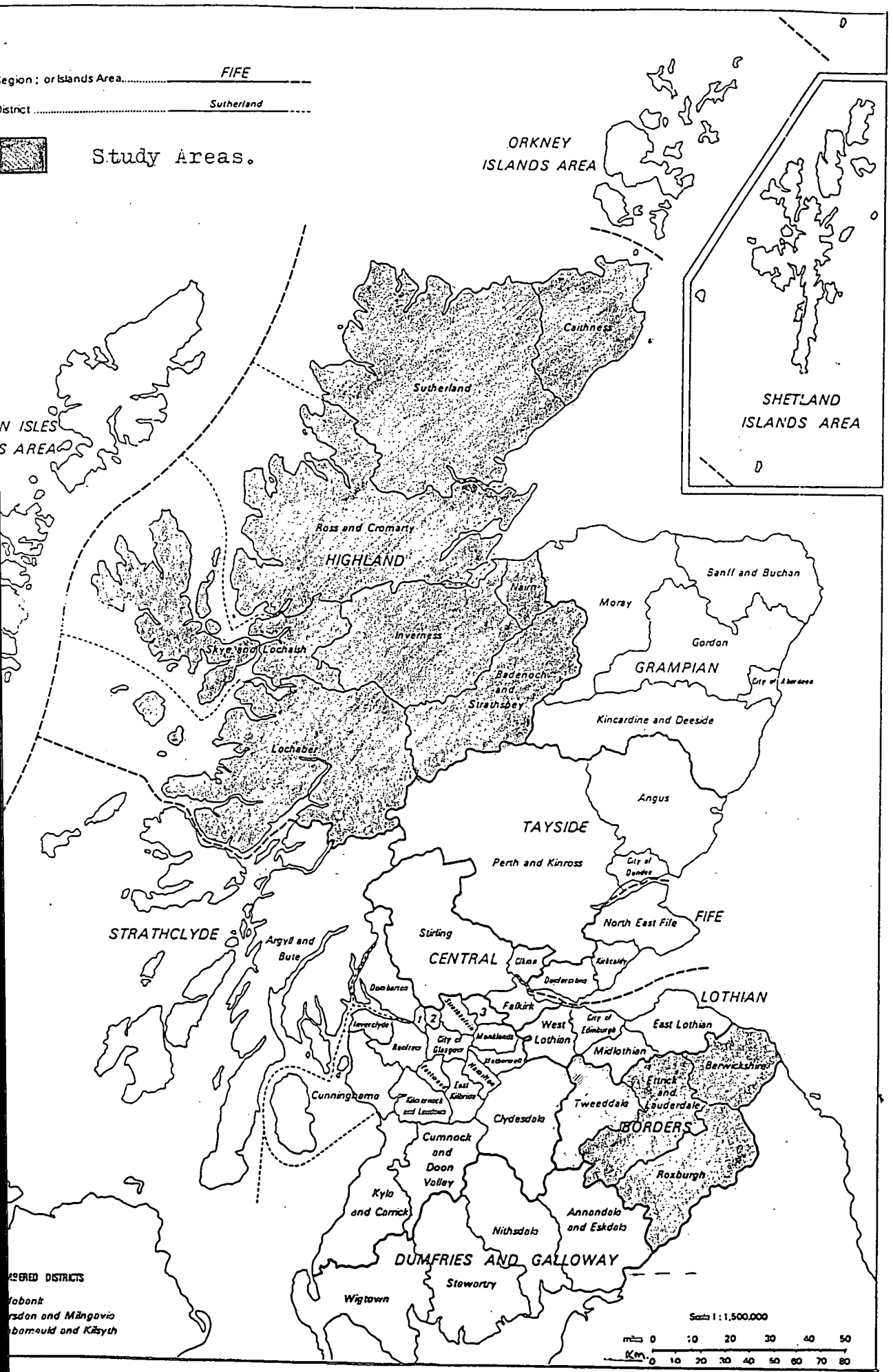


FIGURE 4.1 LOCATION OF STUDY AREAS.

4.2.1 Figure 4.2 shows population density in Scotland at 1991 by District and Island Areas compiled from recent statistics available in the 1991 census. The map sets the Highland Region and Borders Region in the context of population density throughout Scotland. It is evident from this census map that the Highland Region in the extreme north of mainland Scotland is the most sparsely populated Region with a predominant population density of under 0.15 persons per hectare. The Borders Region in the south east of the country, in contrast, has an average overall population density of 0.15 to 0.3 persons per hectare yet is the second most sparsely populated Region in mainland Scotland.

4.2.2 Table 4.1 also reveals that the Highland and Borders Regions are the most thinly populated Regions with average overall population densities of 0.08 and 0.22 persons per hectare respectively, compared with 0.64 for Scotland as a whole. The Table sets the two selected study areas in the context of the 12 Scottish Regions in terms of their geographical extent and resident population and population density.

4.2.3 The physical geography of the Highland Region and the spatially dispersed settlement pattern of both Regions mean that where potential demand for public transport does exist it is dispersed over wide areas and there are few significant concentrations of demand thus making it difficult to operated public transport profitably.

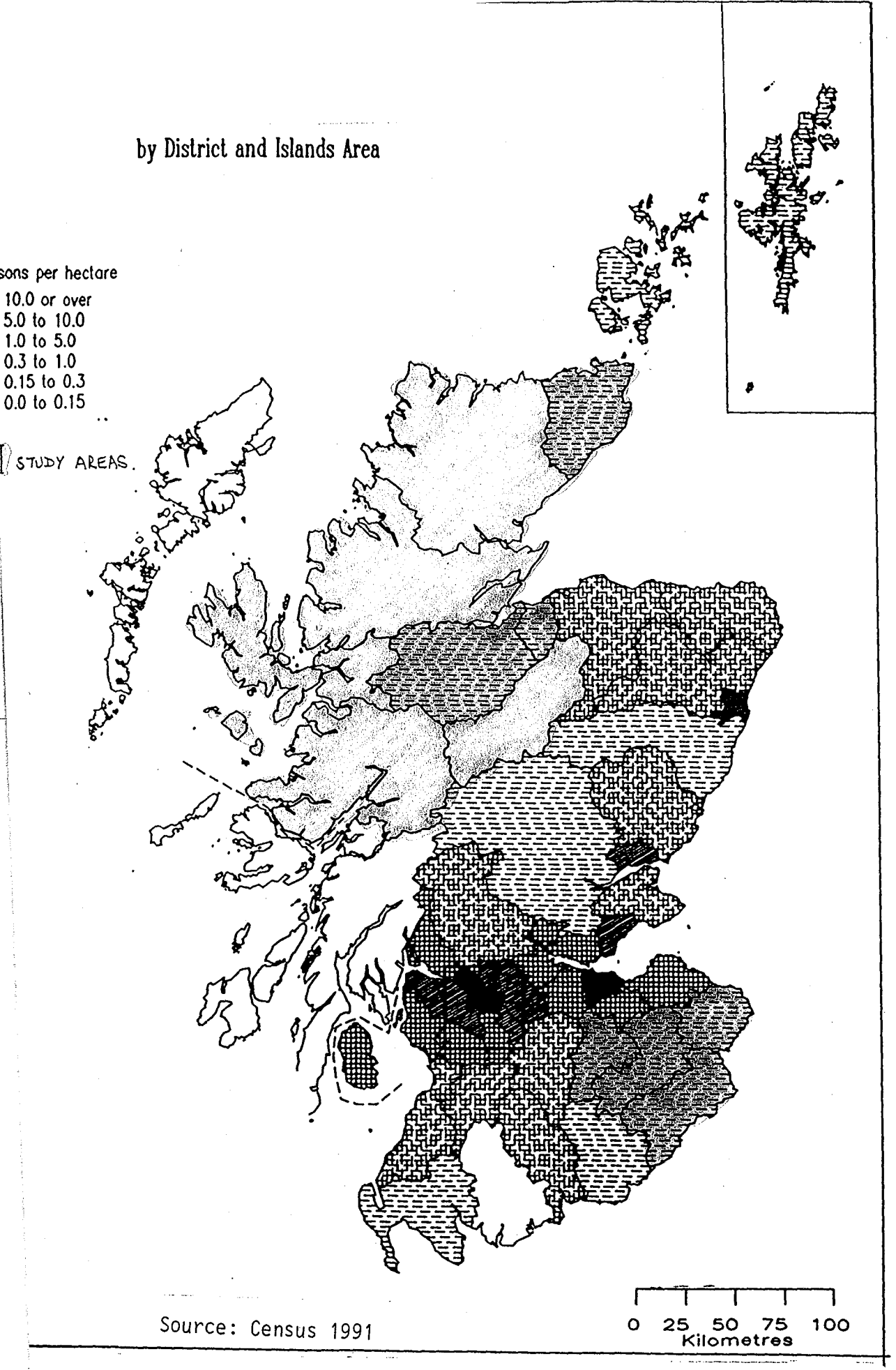


FIGURE 4.2 SCOTLAND:POPULATION DENSITY 1991 IN RELATION TO STUDY AREAS.

TABLE 4.1

SCOTLAND - RESIDENT POPULATION DENSITY BY REGION 1991.

Region	Area (hectares)	Resident Population	Population per Hectare
BORDERS	471,253	102,110	0.22
Central	263,455	262,824	1.00
Dumfries&Galloway	639,561	145,298	0.23
Fife	131,201	336,661	2.57
Grampion	869,772	494,743	0.57
HIGHLAND	2,534,759	199,145	0.08
Lothian	171,595	714,651	4.17
Strathclyde	1,350,283	2,218,932	1.64
Tayside	749,165	376,222	0.50
Orkney Islands	97,581	19,352	0.20
Shetland Islands	143,268	22,138	0.15
Western Isles	289,798	29,075	0.10
SCOTLAND	7,716,690	4,921,151	0.64

Source: Census 1991

TABLE 4.2

HIGH LAND REGION. RESIDENT POPULATION AND AREA BY DISTRICT. 1991.

District	Area (hectares)	Resident Population	Population per Hectare
Bradenoch & Strathspey	232,547	10,457	0.05
Caithness	177,576	26,345	0.15
Inverness	284,775	60,239	0.21
Lochaber	450,738	18,903	0.04
Nairn	42,243	10,358	0.25
Ross & Cromarty	495,214	48,334	0.10
Skye & Lochalsh	270,148	11,454	0.04
Sutherland	586,518	13,055	0.02
TOTAL HIGHLAND REGION	2,539,759	199,145	0.08

Source: Census 1991

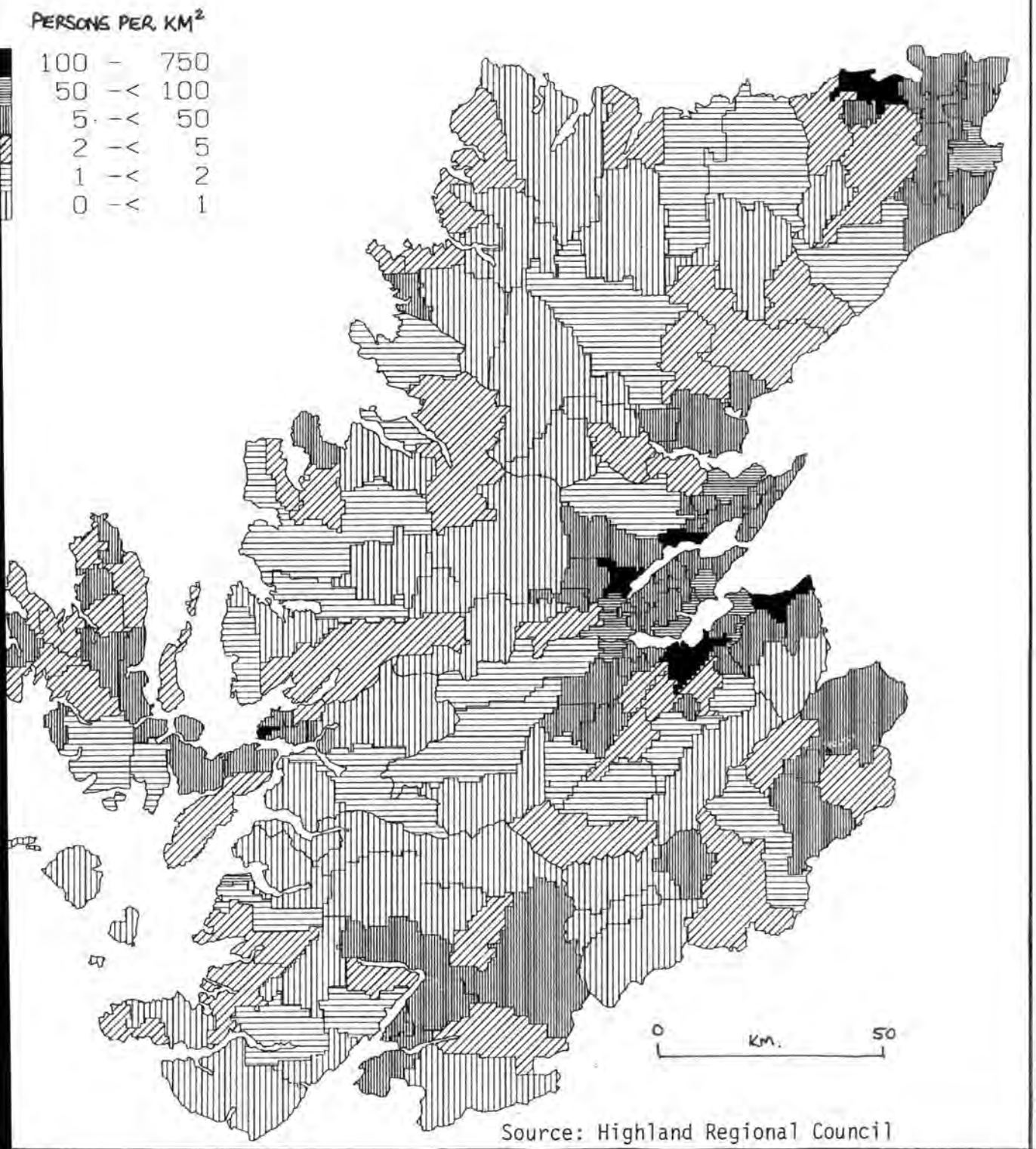
4.2.4 The settlement pattern of the two Regions measured in terms of size of settlement and population diversity, thus reflects the potential market for public passenger transport. Although this will be modified by variations in the age and sex structure of the population and the ownership and use of the private car, the pattern of population distribution and density throughout the two Regions gives some idea of the spatial distribution and potential market for public transport. The traditional settlement pattern of the Highland, Border Regions is one of small dispersed settlements with few large concentrations of demand for public transport making the provision of conventional bus and rail services difficult and unprofitable. The present study will investigate the increasingly important role which is being played in the two Regions by unconventional public transport, not only as an emergency service, but also as a supplementary public transport facility meeting the needs of local residents who, because of previously high levels of car ownership, generally only require an infrequent weekly connection with the local population centre.

4.3 THE HIGHLAND REGION

4.3.1 The Highland Region is the largest Local Authority in the United Kingdom, covering an area of 2,539,759 hectares (or 25,123 square km) or about one third of the total area of Scotland. It had a resident population of 199,145 in 1991 distributed as follows among eight districts (Table 4.2).

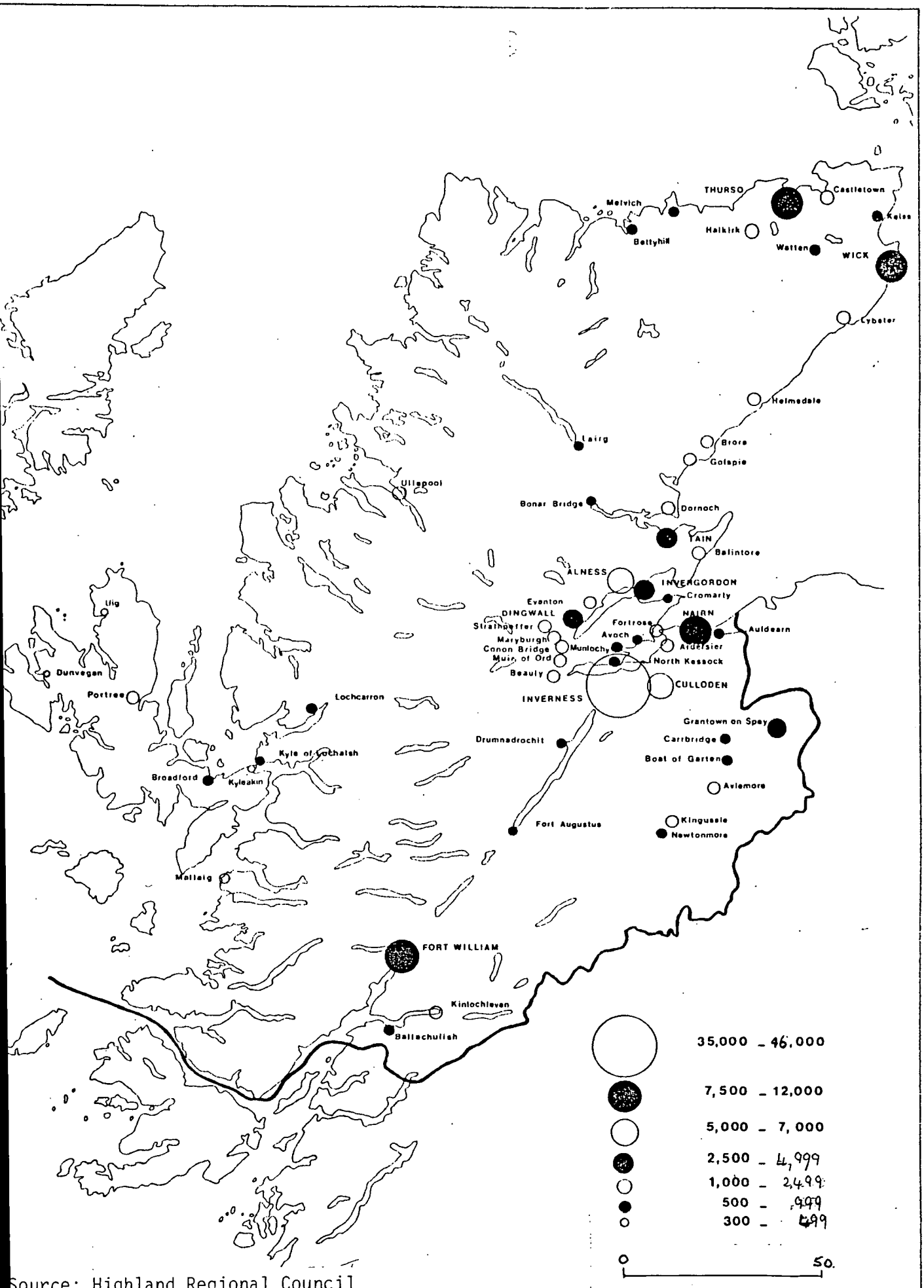
4.3.2 Although population density varies between Districts (see Figure 4.3) with Sutherland registering the lowest (0.02 persons per hectare) at 1991, the average population density of the Highland Region is 0.08, emphasising its predominantly rural character. It is the most sparsely populated local authority in the United Kingdom mainland with some 54% of the population residing in settlements of under 5,000 persons (1). Some two thirds of this population is concentrated in the coastal area around the Moray Firth and in the settlements of Inverness (41,766), of Wick (population 8,754 in 1991), Thurso (9,233) and Fort William (10,939), leaving about 100,000 people scattered over an area nearly as large as Wales. The vast extent and dispersed settlement pattern have rendered the provision of an adequate public transport network for this dispersed rural population a major planning problem. The further development of unconventional public transport to supplement an inadequate system of conventional bus services and rail services is currently being investigated as an alternative means of improving access to these remote communities. However, this investigation is still in its initial stages.

4.3.3 The settlement pattern of scattered small communities distributed in the straths and around the coastal plain is dictated by the topography of the Region (see Figure 4.4). The Highland Region thus illustrates the problem of linear coastal settlements separated from each other by seas and from Central Scotland by extensive tracts of uninhabited upland (2). There is considerable literature on the transport problems of the Highland Region. (3) Since 1745 successive UK governments have provided or paid for, roads, canals, harbours and railways in this area. Payments for postal services have



Source: Highland Regional Council

FIGURE 4.3 HIGHLAND REGION: SETTLEMENT ZONE POPULATION DENSITY 1991.



Source: Highland Regional Council

FIGURE 4.4 HIGHLAND REGION:SETTLEMENT POPULATION 1991.

effectively subsidised the operation of Caledonian-MacBraynes bus and steamship services.

4.3.4 In the more populous coastal areas the settlement pattern and problems are not dissimilar to those experienced in the rest of the United Kingdom. However the successful attraction of industry to the Moray Firth area, largely as a result of the development phase of North Sea oil, has led to a growth rate which exceeds that of the most successful new towns (4). This has led in the short term to a high rate of investment in housing, education, water and sewerage, and transport, as development thresholds have been reached and crossed. It has also led to a marked improvement in the employment prospects and standard of living in the area and has stemmed net migration from the Region. Thus between 1981-91 the resident population of the Region increased by 6.2%. There was a net inward movement of population by migration of 5.2% compared with 1981. All Districts of the Region (except Caithness and Lochaber) benefited from population growth during the intercensal period (5).

4.3.5 In the large rural hinterland of the Region with its settlement pattern of scattered small communities, employment prospects are based principally on the primary industries of farming, fishing and forestry with tourism acting as a major source of employment. Mineral extraction and quarrying also employ a significant number of workers.

4.3.6 Given the size of the Region and the population densities, the per capita cost of providing services, including transport services is very high. This cost is further aggravated by the comparatively high costs of construction in the Region and the present standard of much of the transport infrastructure. A measure of this is given by considering the length of road per 1,000 population in

relation to the other Scottish Regions as shown in Table 4.3 (below).

TABLE 4.3

LENGTH OF ROAD PER 1,000 POPULATION BY REGION.

Region	Length of road per 1,000 population
Borders	30
Central	73
Dumfries and Galloway	299
Fife	61
Grampian	160
HIGHLAND	376
Lothian	43
Strathclyde	52
Tayside	114
Scotland	95

Source: Highland Regional Council

There is thus a pressing need for a comprehensive programme of maintaining an adequate range of services in the face of increased expectations of the local population. The maintenance of a adequate level of public transport and a basic minimum service in the region will, no doubt, play an important role in helping to reduce rural deprivation caused by inaccessibility.

4.3.7 Public Transport in the Highland Region must thus be seen within the context of the unique geographical character of the Region which manifests itself in the following ways:-

1. The vast size of the Region and the consequent long distances between centres of population (see Figure 4.5;
2. The sparse and scattered population;
3. The nature of the terrain which makes communication difficult;

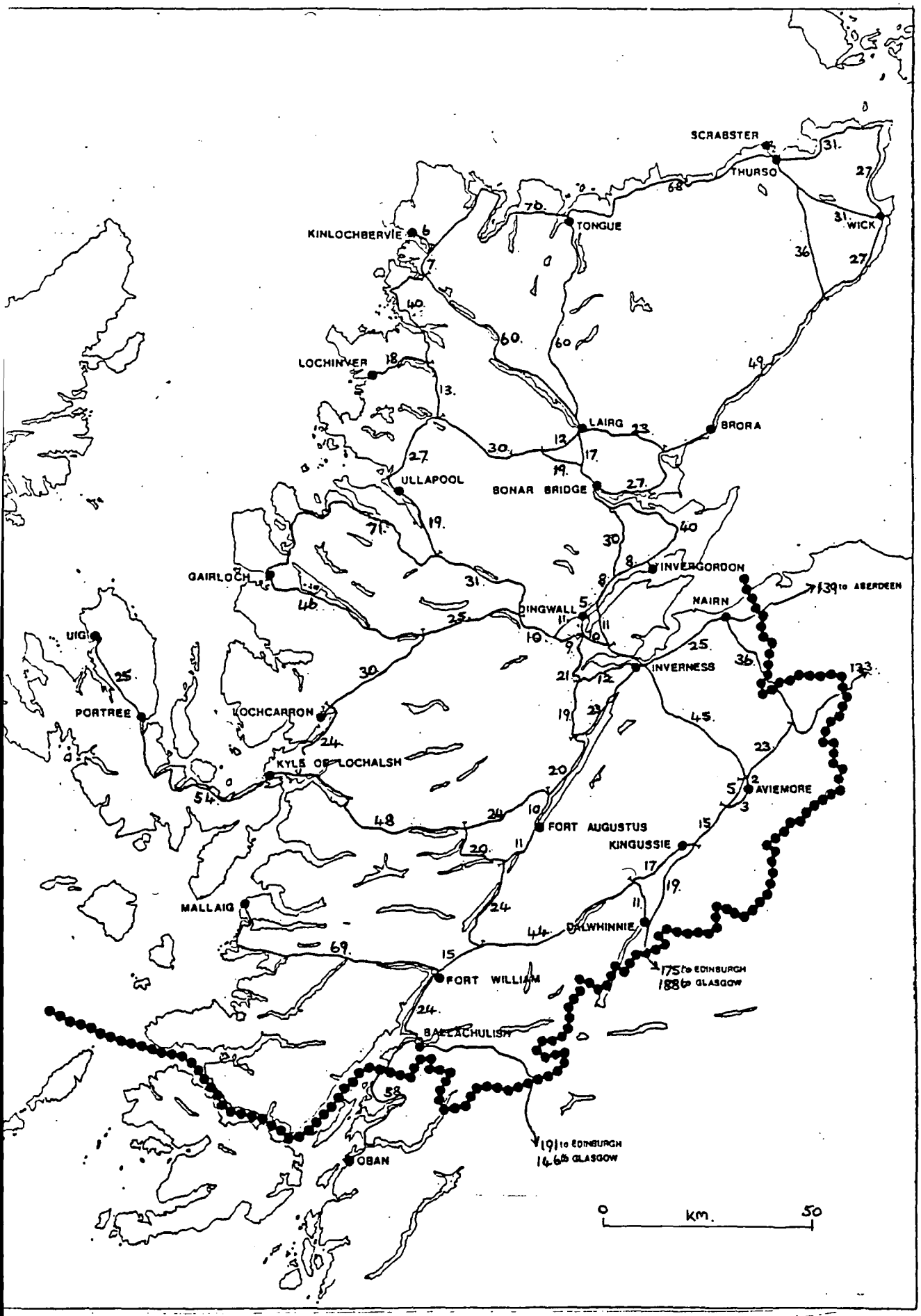


FIGURE 4.5 HIGHLAND REGION:ROUTE DISTANCE IN KILOMETRES.

4. The type of employment in large parts of the Region, eg fishing, fish farming, forestry, crofting and tourist-related employment, none of which give rise to any pronounced demand for regular daily commuting by public transport;

5. Levels of car ownership throughout the Region which are generally higher than the average for Scotland (see Table 4.4). It is noted that the percentage of non-car owning households in the Region declined from 36.0% in 1981 to 31.5% in 1991. During the same period multiple car ownership in the Region (ie households with two or more cars) rose from 14.7% of households in 1981 to 19.3% in 1991.

4.3.8 Thus the population is becoming progressively more mobile with rising levels of car ownership. The maintenance of an adequate level of public transport provision and the sustenance of minimum levels of service must be seen against the context of rising car ownership and greater independence of many households from the need to rely on public transport. Nevertheless approximately one third of households in the Region (24,919) were still without access to a private car in 1991.

4.3.9 Table 4.5 shows the vulnerability of the Highland Region to declining levels of public transport as measured by the percentage of households in each district which still did not have access to a private car in 1991. It is evident that the highest percentage of non-car owning households occurs in Caithness District and the lowest in Badenoch and Strathspey. On the other hand multiple car ownership has risen in all districts of the Region since 1981 and is highest in Ross and Cromarty, thus making more households completely independent of public transport. Nevertheless the Regional Council must still consider the needs of some 24,900 households who are still without access to private trans-

TABLE 4.4

SCOTLAND - PERCENTAGE OF HOUSEHOLDS WITH NO CAR AND WITH 2+ CARS IN 1991 BY REGION

Region	Percentage households with no car	Percentage households with 2+ cars
*BORDERS	31.4	20.8
Central	37.5	19.2
Dumfries & Galloway	30.7	19.6
Fife	37.6	17.5
Grampian	31.7	22.1
*HIGHLAND	31.5	19.3
Lothian	42.5	15.5
Strathclyde	49.2	13.6
Tayside	41.5	16.5
Orkney Islands	26.8	22.4
Shetland Is	29.2	25.9
Western Isles	37.9	16.2
Scotland	42.6	16.2

Source: Census 1991

port when formulating its public transport policies. It must also consider the requirements of one-car owning households where the family car is needed by the head of the household and may not be available for use by the rest of the family. Nevertheless it is clearly evident that the number of households without use of a car and who must rely on public transport is diminishing. Appendix D gives a detailed breakdown of car ownership by settlement in the Highland Region at 1991. It shows the high levels of car ownership which prevail in the remoter parts of the Region. Low car ownership tends to be confined to the larger urban areas.

TABLE 4.5

HIGHLAND REGION - PERCENTAGE OF HOUSEHOLDS WITH NO CAR AND WITH 2+ CARS IN 1991 BY DISTRICT
(with comparisons for 1981)

District	Percentage Households with no car	Percentage Households with 2 + Cars
Badenoch & Strathspey	25.7, (31.5)	21.7, (18.1)
Caithness	36.8, (38.1)	14.6, (13.3)
Inverness	33.8, (38.0)	18.2, (14.0)
Lochaber	32.1, (39.5)	18.9, (12.3)
Nairn	30.9, (35.7)	20.1, (15.3)
Ross & Cromarty	28.0, (32.5)	22.6, (16.5)
Skye & Lochalsh	26.9, (34.6)	20.4, (14.7)
Sutherland	30.4, (34.8)	18.9, (14.8)
HIGHLAND REGION	31.5, (36.0)	19.3, (14.7)
SCOTLAND	42.6, (48.7)	16.2, (11.0)

(Comparable statistics for 1981 are shown in brackets)

Source Census 1991 and 1981

4.3.10 Car ownership among the elderly can be used as an indicator of the scale of the problem of inaccessibility by public transport in rural areas among the elderly. The question arises as to whether the elderly population of the Region has shared in the general growth in car ownership during the last decade and whether they are now able to rely on personal transport as a substitute for regular, conventional bus and rail services.

4.3.11 Table 4.6 shows the distribution of non-car owning households among the elderly by district in the Highland Region in 1991 using recently published census data. Levels of car ownership are dependent upon a number of conditions including income and the need to overcome isolation and inaccessibility caused by a deteriorating public transport system. The ownership of a car can also give the owner a greater degree of independence and flexibility in his activities. However, some elderly people may be able to afford a car, but cannot drive it due to physical or mental disability, such as deteriorating eyesight, and hence remain dependent upon public transport.

TABLE 4.6

HIGHLAND REGION - PERCENTAGE OF PENSIONER HOUSEHOLDS WITHOUT CARS 1991 : BY DISTRICT

District	Percentage of Pensioner Households with no Car	
Badenoch & Strathspey	40.2	(45.7)
Caithness	53.7	(57.9)
Inverness	50.9	(57.5)
Lochaber	50.9	(58.9)
Nairn	49.6	(54.7)
Ross & Cromarty	44.4	(51.3
Skye & Lochalsh	42.7	(49.9)
Sutherland	43.7	(51.4)
HIGHLAND REGION	47.9	(54.4)
SCOTLAND	62.3	(68.6)

(Comparable statistics for 1981 are shown in brackets)

Source Census of Population 1991 and 1981

4.3.12 Table 4.6, therefore, shows that some 47.9% of all households with pensioners are without access to a car in the Highland Region as a whole in 1991. This is a slight improvement over the 1981 percentage of 54.4%. Thus some 12,287 pensioner households were still without a car in the Highland Region in 1991. This percentage of pensioner households reaches its greatest level in Caithness (53.7% or 5,644 households) and its lowest in Badenoch and Strathspey (40.2% or 1,747 households). These non-car owning households are likely to remain completely dependent upon public transport for social, shopping and medical journeys. This number represents the size of the captive market for public transport in the Highland Region since these old people are most likely to remain completely dependent upon the maintenance of an adequate public transport system. Although the number is relatively small (12,287 pensioner household) the degree of hardship and inconvenience experienced by these householders will have increased as a result of the physical contraction of the bus network, higher bus fares and the need to reach medical, post office and shopping facilities which are becoming increasingly concentrated in the larger urban areas. In the context of this rural depriva-

tion, resulting from the potential immobility of the elderly, there would seem to be an urgent need to explore the possibility of developing innovatory public transport as a substitute for conventional bus services in certain areas.

4.3.13 The age structure of the population is also likely to influence the market for public passenger transport. Schoolchildren, young adults and the elderly are particular dependent upon public transport. The aging of the population, reflected in a rising number of pensioners from 29,542 in 1981 to 33,721 in 1991 is likely to continue. This age group is often most dependent upon public transport. As an age group their average income is low and they have less frequent need to travel. Although many can afford to purchase a car, some may remain non-drivers due to age or physical disability. Unconventional public transport can thus often be an important mode for the infrequent, but often essential trips which need to be made by this age group into the local market centre for shopping, hospital visiting, medical attention or to collect the pension. Even wealthier in-migrants are subject to deteriorating health as they get older.

4.3.14 The Highland Regional Council have identified a hierarchy of service centres (see Figure 4.6 and Table 4.7). Inverness (population 41,766 in 1991) dominates this pattern as a Regional shopping and service centre because of its size and location. Sub-regional centres include Fort William (population 10,939), Thurso (9,233), Wick (8,754), Nairn (8,488) and Dingwall (5,459). From a geographical point of view this hierarchy, based on settlement population, centrality and level of service provision, would seem to be a logical one.

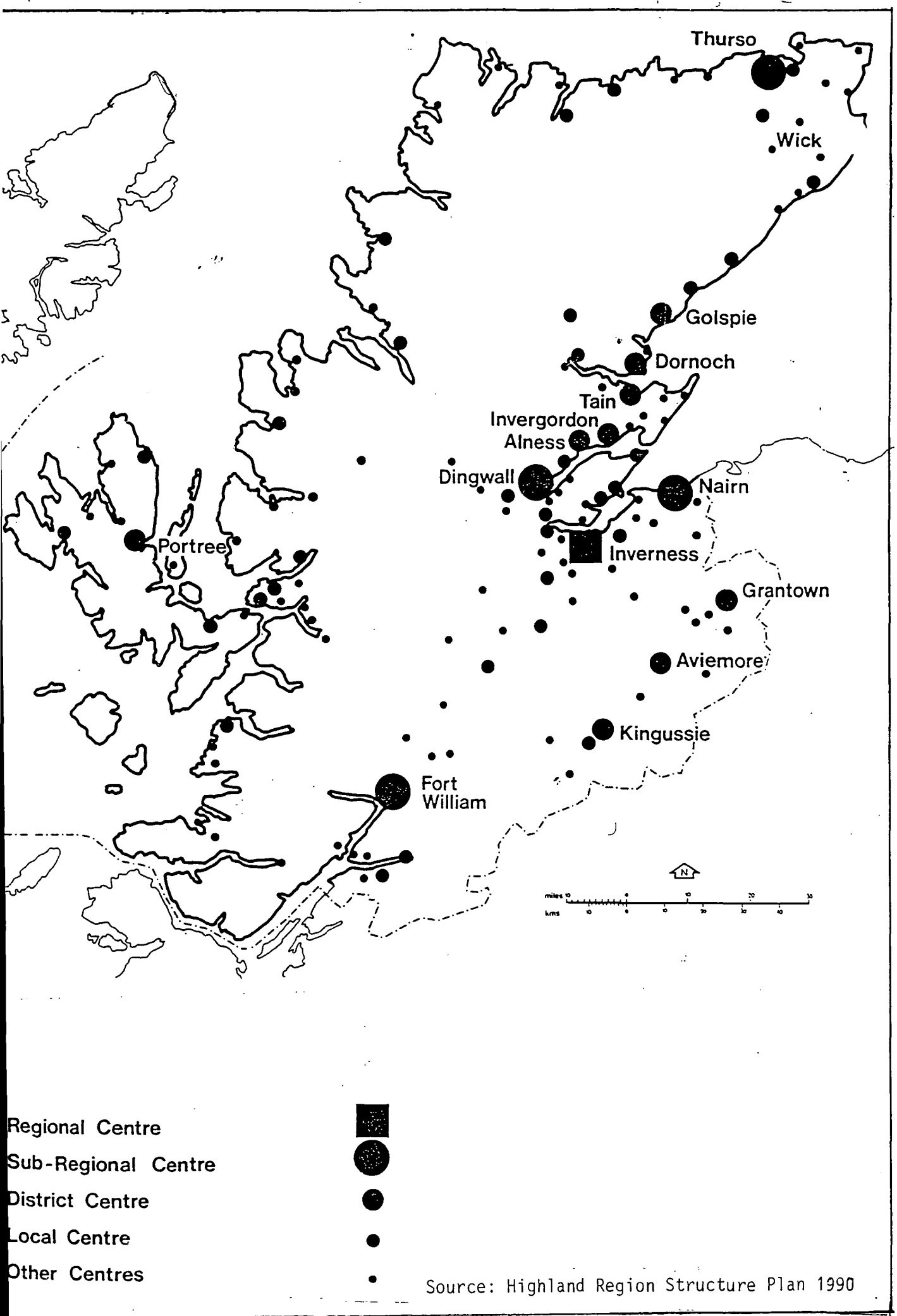


FIGURE 4.6 HIGHLAND REGION:DISTRIBUTION OF SERVICE CENTRES 1990.

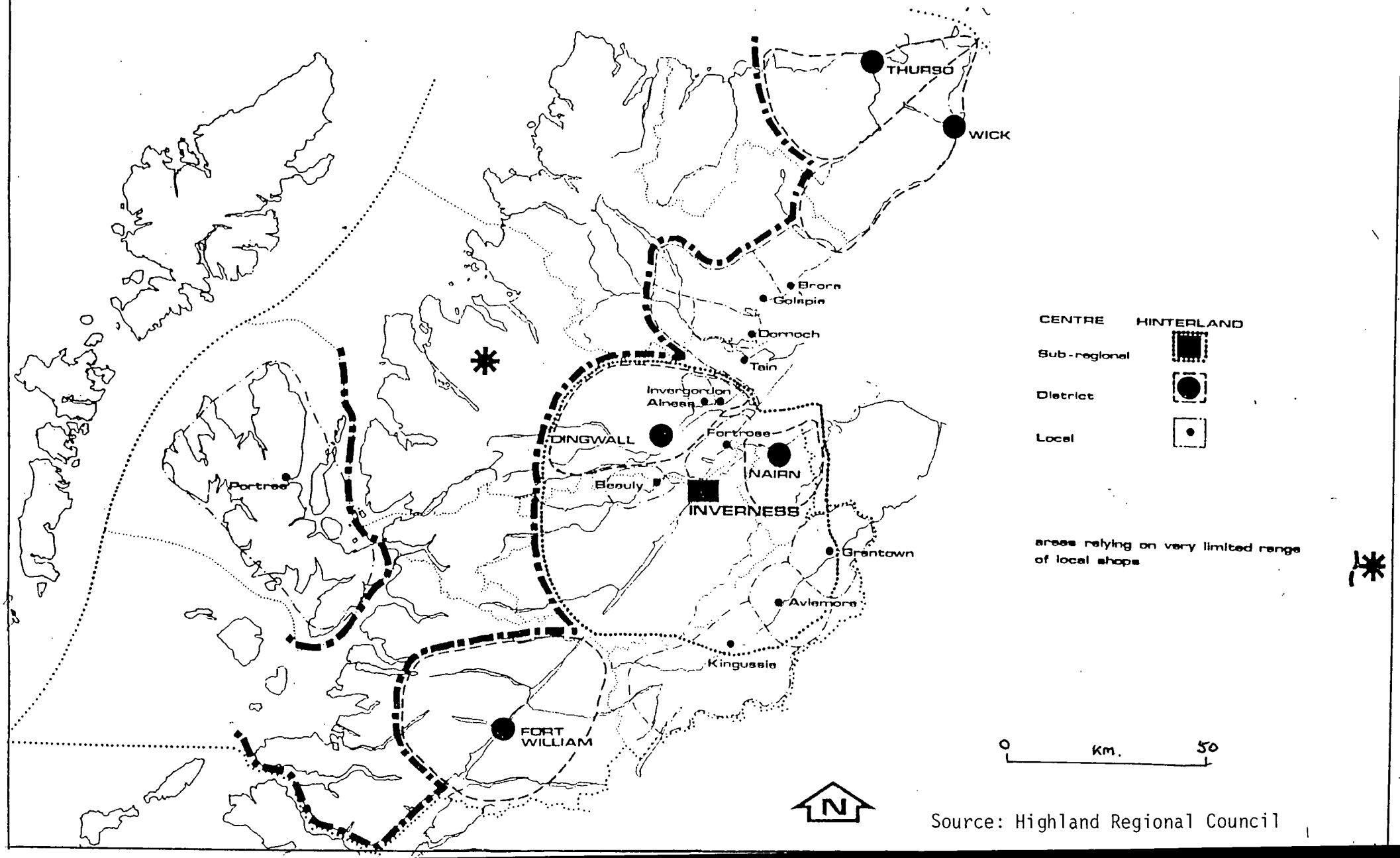
TABLE 4.7

HIGHLAND REGION: HIERARCHY OF SERVICE CENTRES 1991
(Settlement populations (in brackets) were calculated from 1991 census)

Regional Centre	Sub Regional Centre	District Centre
Inverness (41,760)	Fort William (10,930)	Alness (5,870)
	Thurso (9,230)	Invergordon (4,140)
	Wick (8,750)	Tain (4,110)
	Nairn (8,480)	Dornoch (2,120)
	Dingwall (5,450)	Golspie (1,650)
		Grontown (3,330)
		Aviemore (2,400)
		Kingussie (1,550)
		Portree (2,450)

Source: Highland Regional Council Structure Plan 1990 and Economic Review 1994

4.3.15 Figure 4.7 shows the extent of regular shopping hinterlands of these centres as defined by the Regional Council in its Structure Plan. It is vital that adequate public transport links are maintained between these shopping/service centres and their rural hinterlands. The Regional Council is committed in its 1990 Structure Plan to improve the shopping environment by improved public transport (6). The importance of countryside shops, village shops and/or post offices in one-shop communities has also been emphasised by the Regional Council and their role in meeting the needs of isolated communities recognised (7). Figure 4.8 shows the distribution of shopping provision throughout the Highland Region while Figure 4.9 identifies rural communities with only one shop. It is obviously desirable that these localised shopping facilities remain accessible to the dispersed rural population that they serve by either private or public transport. Innovatory public transport can be one means of reaching



Source: Highland Regional Council

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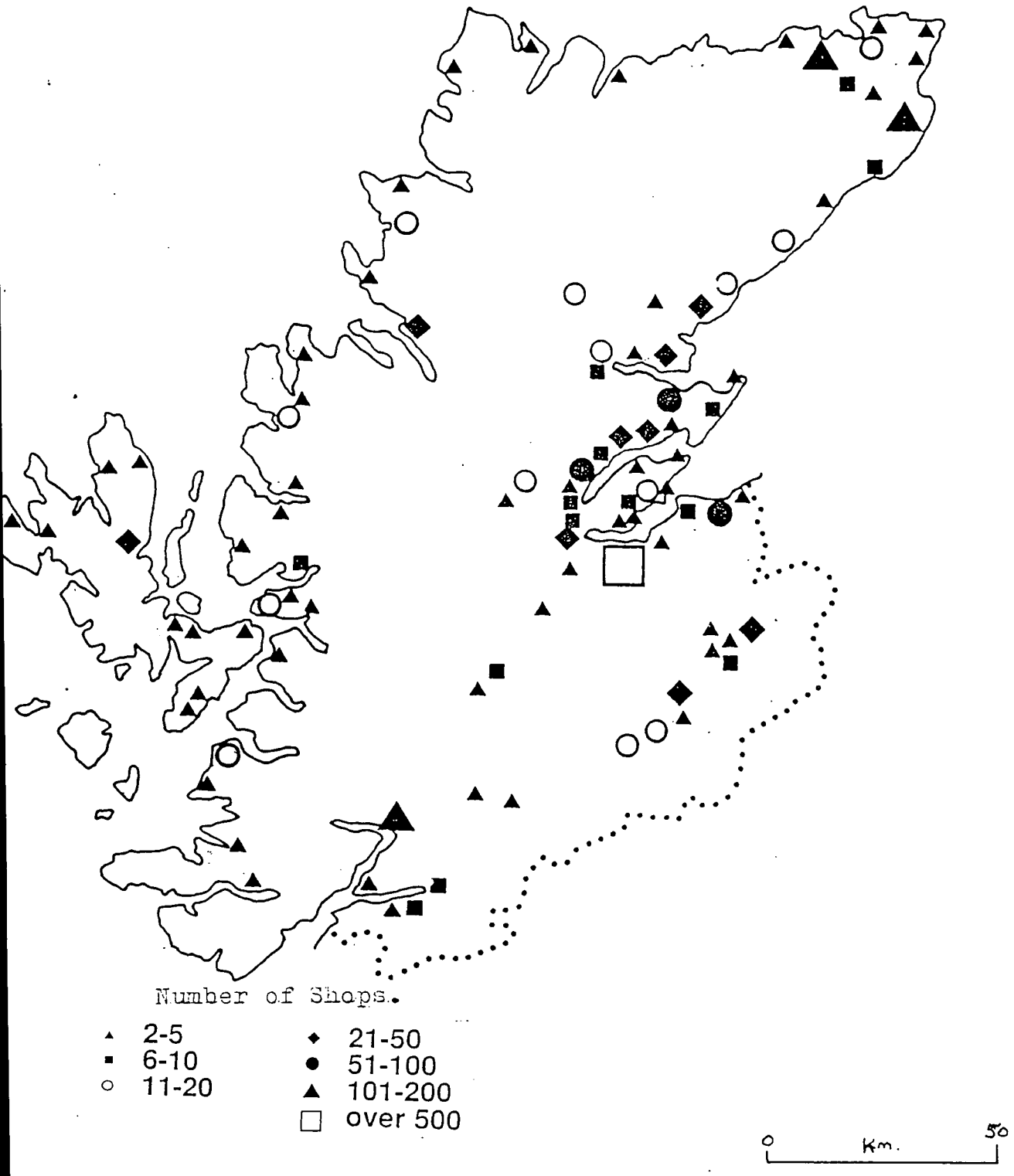
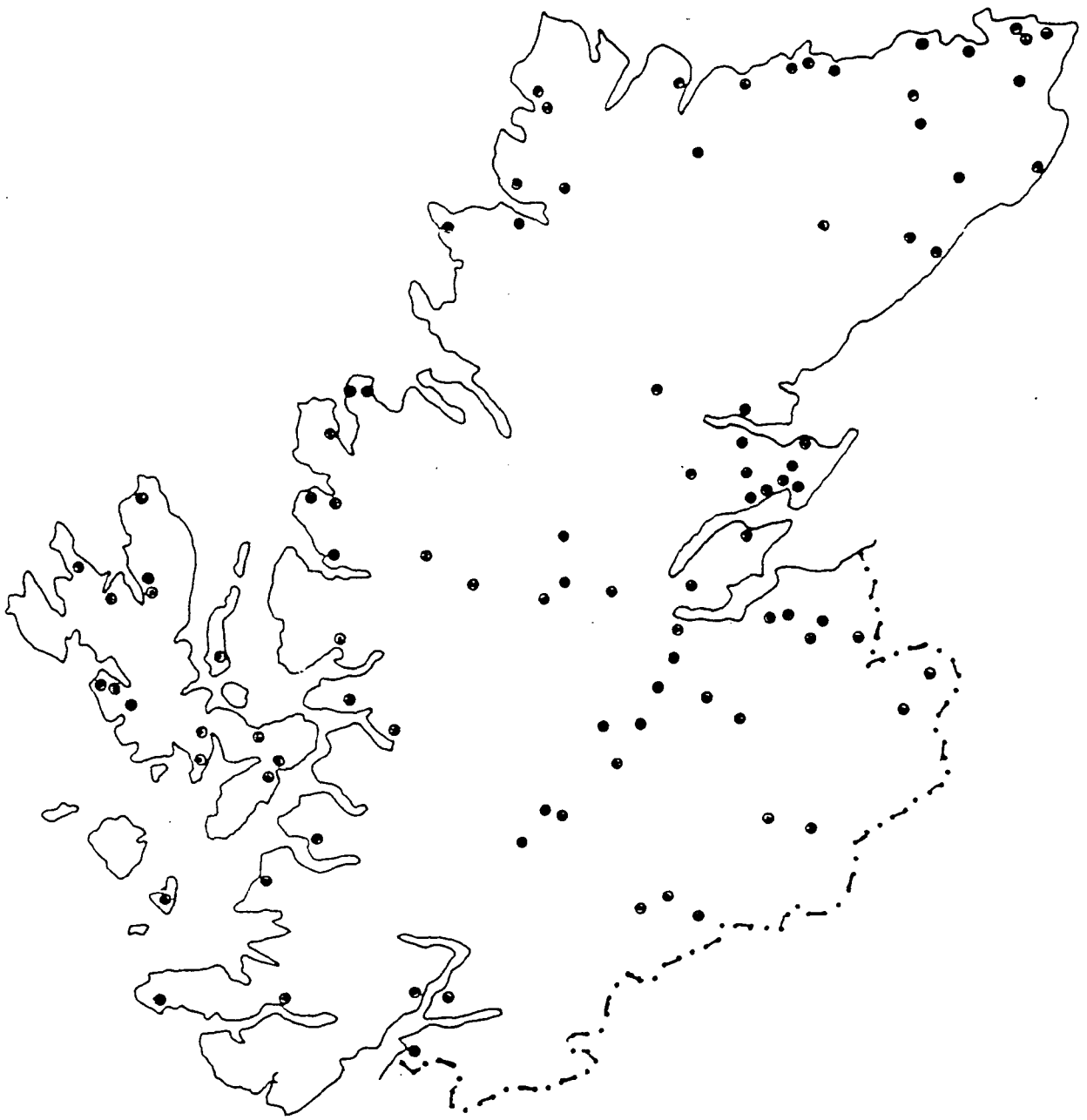


Source: Highland Regional Council

FIGURE 4.8 HIGHLAND REGION: DISTRIBUTION OF SHOPPING PROVISION 1991.



ource: Highland Regional Council

FIGURE 4.9 HIGHLAND REGION:DISTRIBUTION OF SINGLE SHOP COMMUNITIES 1991.

these dispersed shops and post offices by those households which may not possess a private car or where the family car is unavailable during the weekday. Single shop communities rely on their local shop or post office and can suffer deprivation when this is closed. In the absence of a network of conventional bus services, unconventional public transport can be a means of enabling these isolated rural communities to reach their local market town where a more comprehensive range of shopping provision is available. Champion and Townsend have pointed out that the elderly and those on low incomes are the main local shoppers and recognise the hardship which can be suffered by this element of the rural population where sub-post offices, and chemists shops, in particular, are closed. (8). They also point out that, in general, people from rural communities are faced with much longer journeys to hospital (whether patients or visitors) than town dwellers. Rural access to hospitals by public transport is generally poor, and, in the case of some rural communities, impossible. (9)

4.3.16 House noted that since the Second World War, economies of scale in medicine and education have favoured the development of the relatively large district general hospital of 800-1,000 beds and the secondary school of 500-1,000 pupils in the outer rural areas such as the North West Highlands and Islands of Scotland (10). Primary schools, maternity and geriatric hospitals are more frequently dispersed, but if the rural population wish to participate in rising national standards of living and welfare they are increasingly forced to travel to urban service centres in order to obtain these benefits. The development of unconventional public transport may play an increasing role in overcoming the physical isolation of remote rural communities,

in this context, in the Highland Region as in other "outer rural areas" of upland Britain.

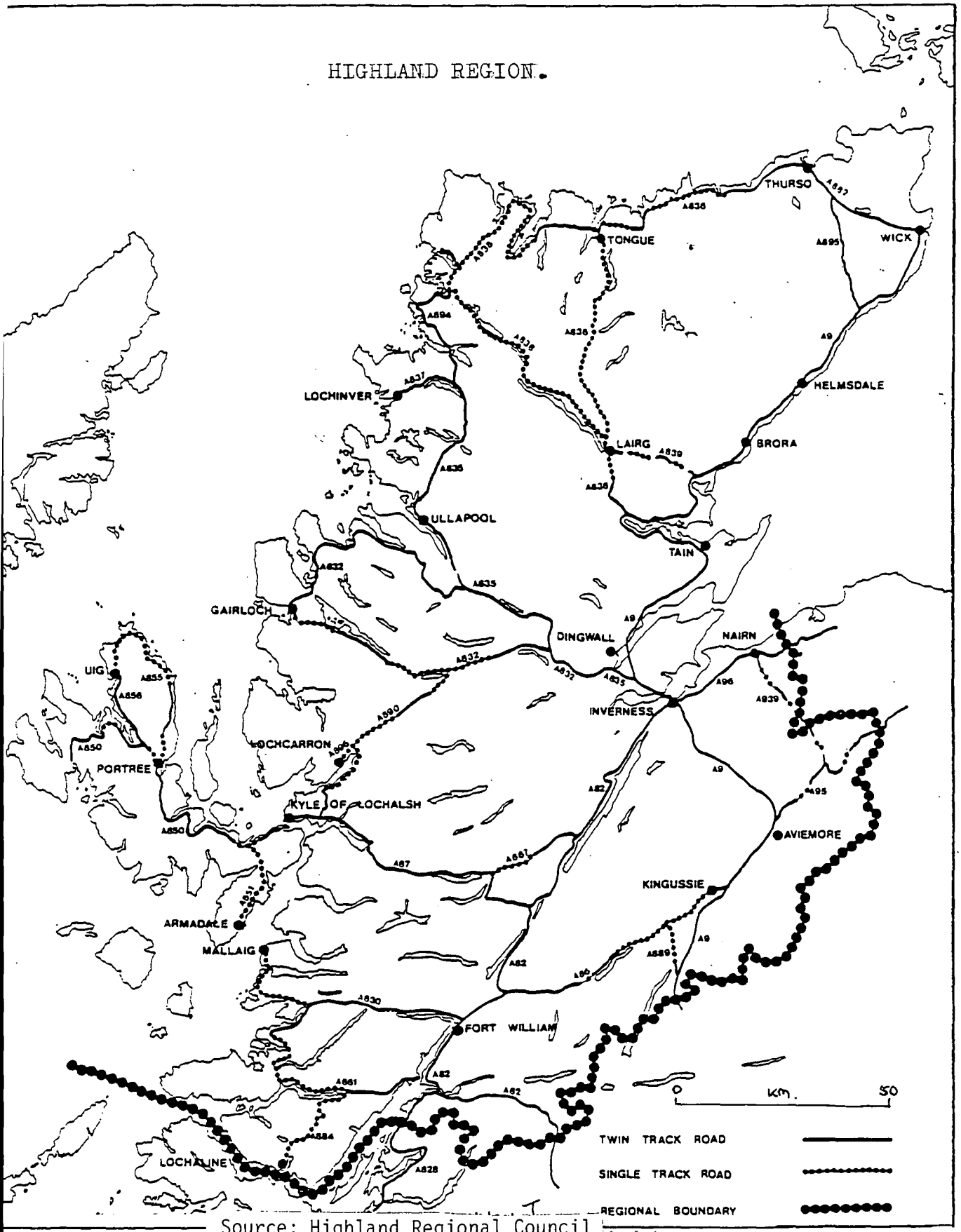
4.4 **KEY ISSUES**

4.4.1 As a consequence of its peripheral and remote geographical location at the northern extremity of the United Kingdom mainland and its vast extent, the Highland Regional Council have identified two key issues in relation to the formulation of its transport policies. (11) These are:-

1. The need to establish a basic network of strategic transport routes to give access to all parts of the Region and link it with the remainder of the United Kingdom. The establishment of this strategic network is seen as being one of the fundamental objectives of the Regional Council and a necessary objective of its overall development strategy.

2. The provision of an adequate transport infrastructure within communities and groups of communities in order to ensure that their development is not hampered by inadequate access.

4.4.2 The network of single and twin-track roads in the Highland Region is often inadequate for the purpose of providing access by both public and private transport to remote and inaccessible communities (Figure 4.10). The generally small size of communities and the comparatively long distances between them mean that community services, including public transport, have often to be provided at lower thresholds and at a higher cost than elsewhere in the United Kingdom. It may, therefore, be necessary to improve or re-build roads in some of the more remote parts of the region where there are still many small communities which do not have adequate access by public as well as private transport to the public road system (12). In such areas post bus services are ideally suited to negotiate steep and sinuous



Source: Highland Regional Council

FIGURE 4.10 STRATEGIC ROAD NETWORK:SINGLE TRACK AND TWIN TRACK ROADS

roads which are often in need of upgrading and maintenance by, for example, the removal of hazards and the strengthening of weak bridges in order to gain access to isolated dwellings or remote communities or crofts.

4.4.3 Innovative public transport services, as well as the use of school vehicles by fare-paying passengers are ideally adapted to sparsely populated and remote areas such as the Highland Region where the number of users is so small that no orthodox bus service could survive except by unreasonably heavy subsidy. The role and pattern of use of such services will be described in detail in later chapters as the thesis unfolds.

4.5 THE BORDERS REGION

4.5.1 The Borders Region will be used as the second of the two case studies to demonstrate the role of unconventional public transport in rural Scotland. It contrasts markedly with the Highland Region, described above, not only in its geographical location at the south eastern extremity of Scotland (see Figure 4.11), but also in terms of its topography, settlement pattern, population density and distribution and consequent shape of its public transport network (see Figure 4.12).

4.5.2 The resident population of the Borders Region was 103,881 in 1991, distributed as follows by District (see Table 4.8 and Figure 4.12).

TABLE 4.8
BORDERS REGION - RESIDENT POPULATION AND AREA BY DISTRICT 1991

District	Area (Hectares)	Resident Population	Population per Hectare
Berwickshire	90,75	19,174	0.21
Ettrick & Lauderdale	136,51	34,038	0.25
Roxburgh	154,048	35,346	0.23
Tweedale	89,939	15,323	0.17
TOTAL BORDERS	471,253	103,881	0.22

Source: Census 1991

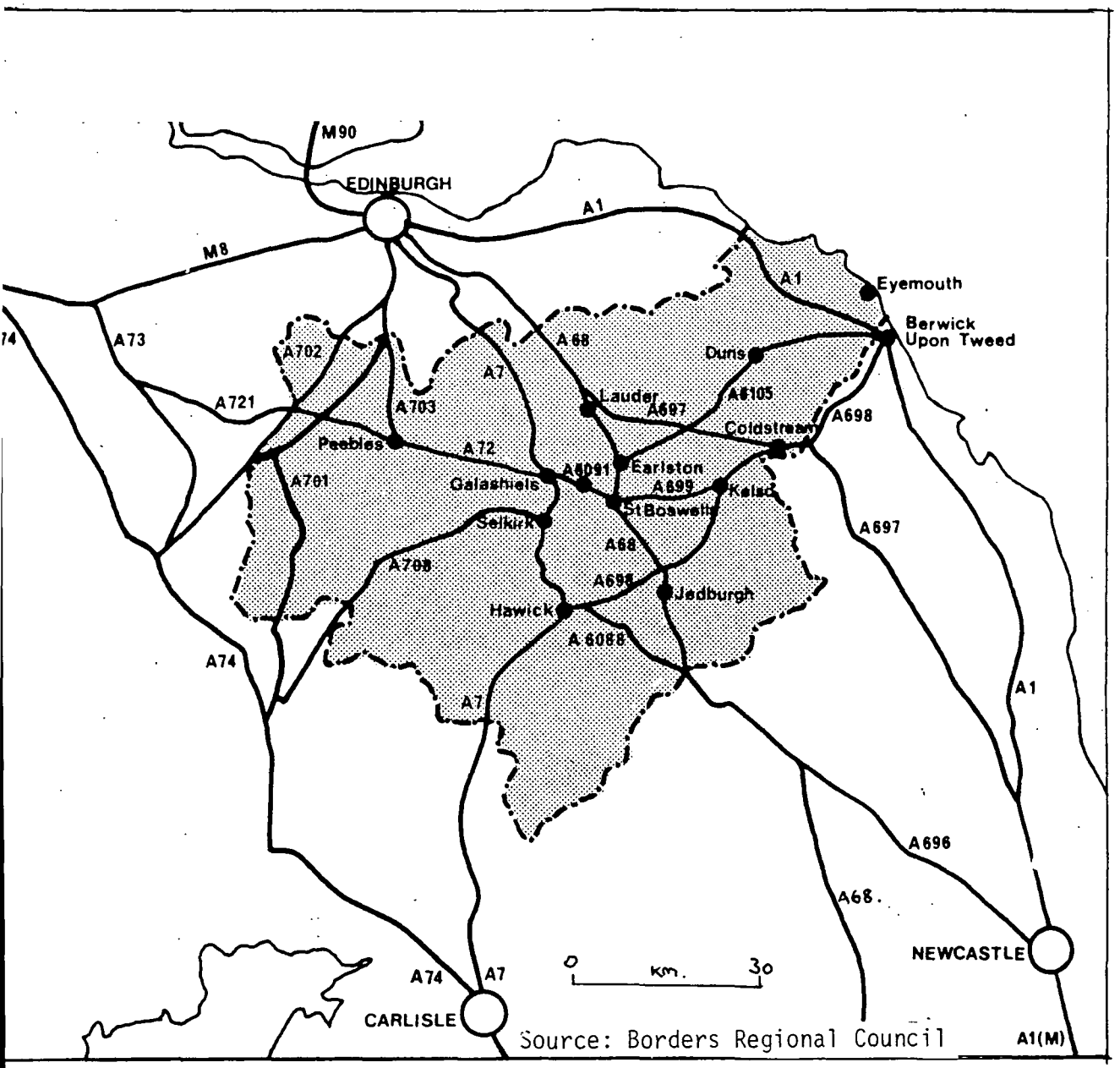
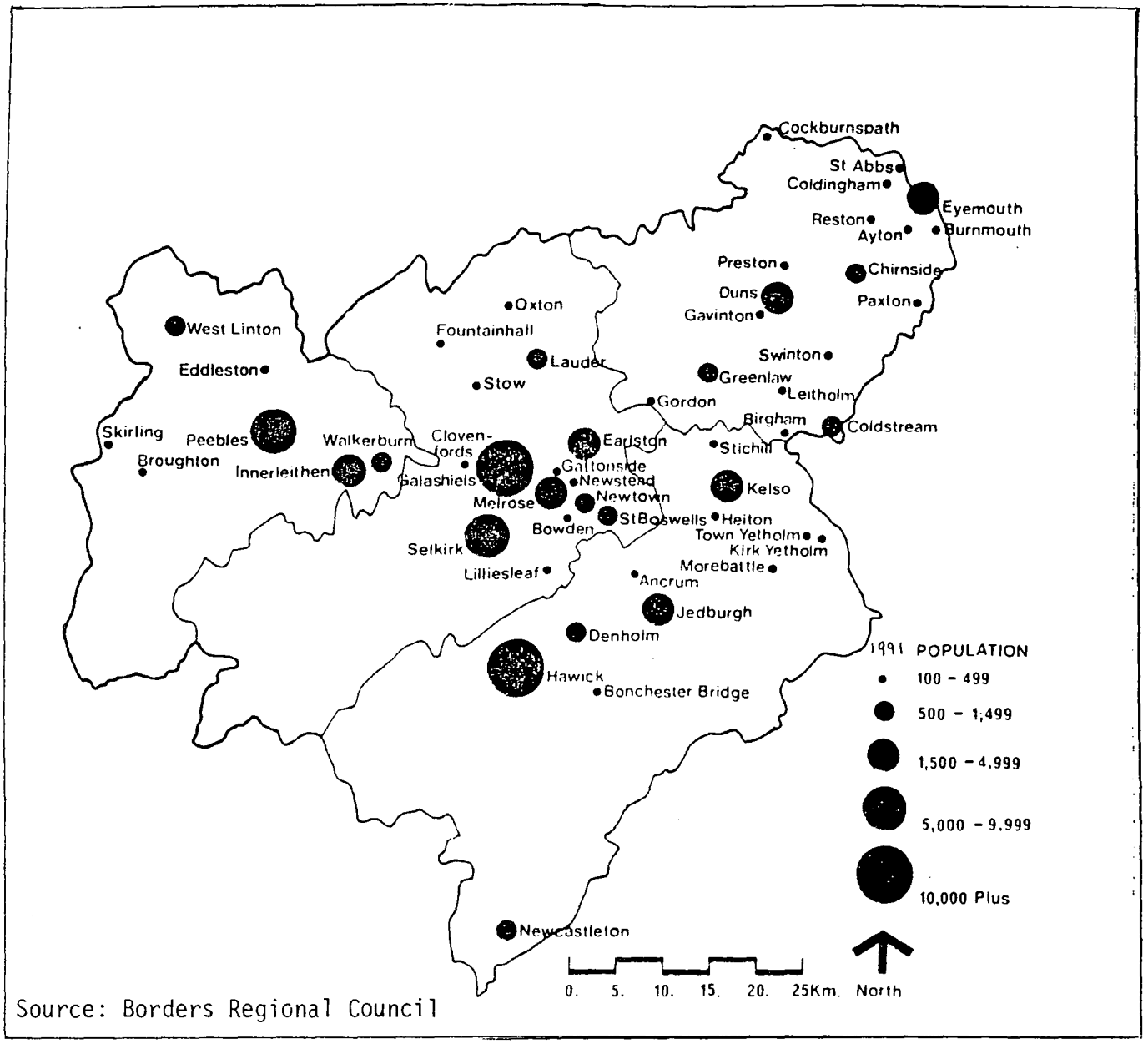


FIGURE 4.11. THE LOCATION OF THE BORDERS REGION AND MAJOR ROAD LINKS.



Source: Borders Regional Council

FIGURE 4.12. BORDERS REGION: SETTLEMENTS IN THE BORDERS REGION 1991.

4.5.3 The predominant rurality of the Borders Region is illustrated by its average overall population density of 0.22 persons per hectare in 1991 compared with 0.08 for the Highland Region and 0.64 for Scotland as a whole. It is the second most sparsely populated Region in Scotland (after Highland Region) (see Table 4.1). Its generally low population density and relatively uniformly dispersed settlement pattern outside the major urban centres of Galashiels , Selkirk and Melrose, mean that the potential market of public transport is spatially dispersed. There are thus few significant concentrations of demand outside the "woollen towns", making bus routes generally long and circuitous and running costs per vehicle mile generally high. In 1991 some 53% of the population resided in settlements of under 5,000 persons, reflecting the rurality of the Region. The only major centres of population over 5,000 population in 1991 were Ha. wick (15,719), Galeshiels (13,766), Peebles (7,080), Kelso (6,045) and Selkirk (5,952).

4.5.4 Unconventional public transport has an important potential role as a provider of transport for those sectors of the population who do not have access to a car. These typically include the elderly, the young and the unemployed and those in low income groups or with a physical disability which prevents them from driving a car.

4.5.5 Table 4.9 shows the distribution of non-car owning households by district throughout the Borders at 1991. It also indicates by contrast, the distribution of multi-car ownership at the same date. This table may be compared with Table 4.4 (above) which sets the Borders Region in the context of other Scottish Regions and Scotland.

TABLE 4.9

BORDERS REGION CAR OWNERSHIP BY DISTRICT 1991

(With comparison for1981)

District	Percentage Households with no Car		Percentage Households with 2 + Cars	
Berwickshire	26.6	(33.1)	22.3	(17.5)
Ettrick & Lauderdale	31.3	(39.2)	21.2	(15.0)
Roxburgh	35.4	(40.7)	18.1	(13.5)
Tweedale	30.2	(37.9)	24.6	(16.2)
BORDERS REGION	31.4	(38.4)	20.8	(15.1)
SCOTLAND	42.6	(48.7)	16.2	(11.0)

(Comparable Statistics for 1981 are shown in brackets)

Source: 1991 Census Monitor

4.5.6 It is noted that approximately one third of households in the Borders were without a car in 1991. Roxburgh was the district with the highest percentage of non-car owning households and Berwickshire the lowest. The percentage of households for the Borders as a whole declined from 38.4% in 1981 to 31.4% in 1991. Variations in levels of car ownership generally tend to reflect differing income levels and variations in the adequacy of public transport, making the acquisition of a private car a social necessity as a means of transport for essential journeys. This pattern is also typical of other predominantly rural areas of Scotland and the remainder of the United Kingdom.

4.5.7 At the other extreme, multiple car ownership continued to rise throughout the Region from 15.1% in 1981 to 20.8% in 1991. However, despite this clear evidence of the growing level of car ownership in the Region during the last decade, with the corollary of a more mobile population, there still remain

13,574 households which are without a car and hence are most likely to be dependent upon public transport. Appendix F gives a detailed breakdown of car ownership by settlement in the Borders Region at 1991 and shows the extremely high levels of car ownership (including multiple car ownership) which prevail in the rural areas.

4.5.8 If one examines car ownership among the elderly sector of the population in the Region the following pattern emerges (Table 4.10).

TABLE 4.10
BORDERS REGION - PERCENTAGE OF PENSIONER HOUSHOLDS WITHOUT CARS BY DISTRICT 1991
(with comparisons for 1981)

District	% of Pensioner households with no cars
Berwickshire	45.3 (51.8)
Ettrick & Lauderdale	50.8 (58.4)
Roxburgh	53.3 (60.5)
Tweeddale	49.9 (56.8)
BORDERS	50.5 (57.6)
SCOTLAND	62.3 (68.6)

(Comparable statistics for 1981 are shown in brackets.)

Source: 1991 census monitor.

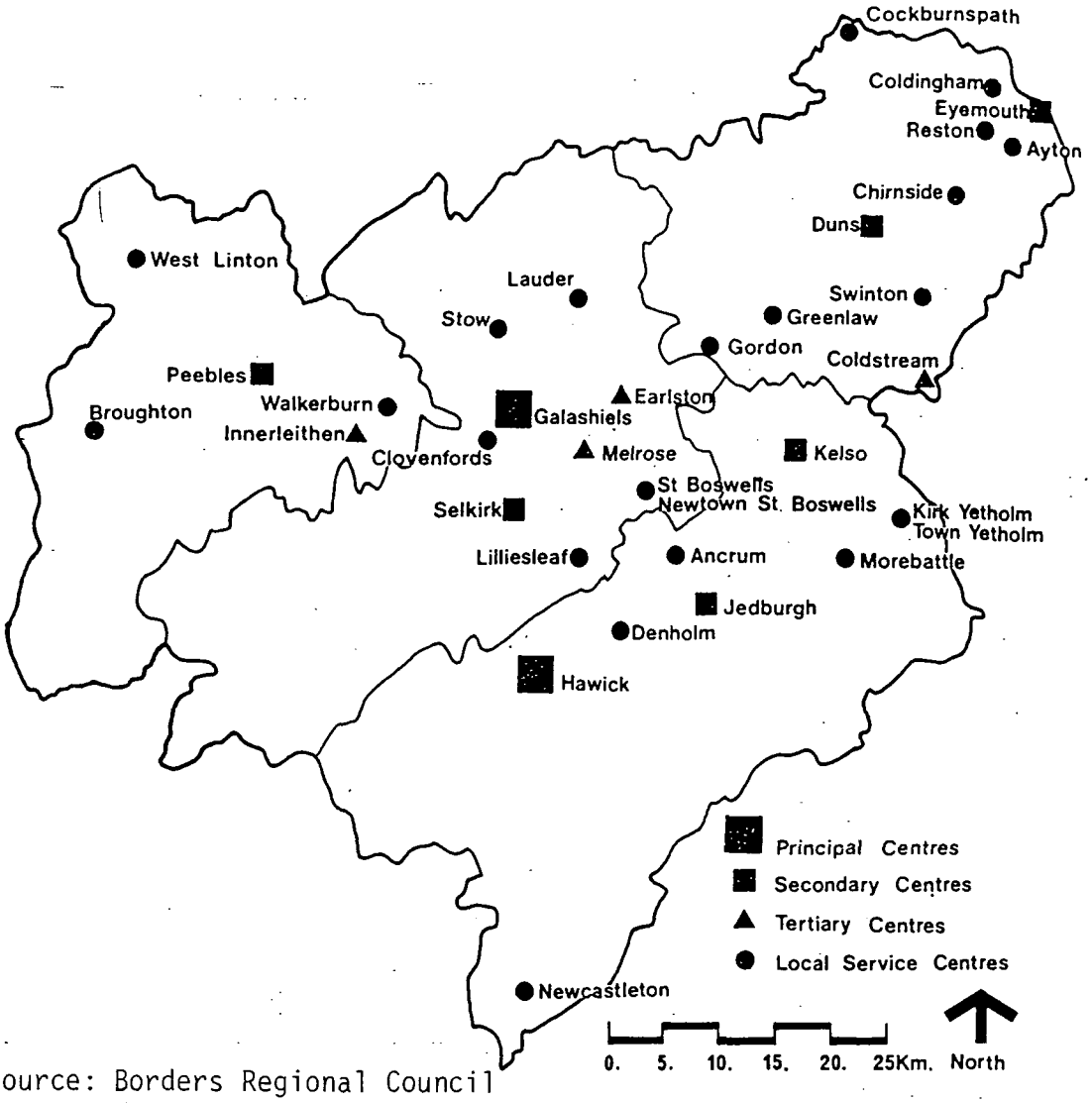
4.5.9 The percentage of pensioner households without a car has declined from 57.6% in 1981 to 50.5% in 1991. Thus approximately half of all pensioner households in the Borders still remain without a car, ie 8,086 households. It is this element of the population which is probably most likely to benefit from the development of unconventional public transport as a

supplementary service to that provided by conventional bus services. The elderly sector of the population are generally characterised by lower incomes and greater propensity to have physical disabilities which prevent them from driving a car. The captive market for public transport (including innovative modes) in the Borders Region was thus 8,086 pensioner households at 1991.

4.6 SETTLEMENT PATTERN

4.6.1 The 1991 Borders Region Structure Plan outlined the settlement pattern in the Region and identified a hierarchy of settlement types comprising principal, secondary and tertiary centres(13). It also identified 23 local service centres or key villages (see Figure 4.13). The lack of a single major centre in the Region means that the provision of public transport is an essential service. Adequate access to the external shopping and service centres of Edinburgh, Berwick and Carlisle is also vital.

4.6.2 The 12 principal, secondary and tertiary centres were proposed as growth points for future development in the Regional Structure Plan. A total of 35 growth settlements were identified with an estimated total population of 79,430 persons in 1991. The following Table (Table 4.11) summarises this settlement hierarchy, identified for the purposes of the Structure Plan Review. It is based on settlement size and function and geographically appears logical and realistic especially at principal, secondary and tertiary centre level.



Source: Borders Regional Council

	BERWICKSHIRE	ETTRICK AND LAUDERDALE	ROXBURGH	TWEEDDALE
Principal Centres		Galashiels/Tweedbank	Hawick	
Secondary Centres	Duns Eyemouth	Selkirk	Jedburgh Kelso	Peebles
Tertiary Centres	Coldstream	Earlston Melrose		Innerleithen
Local Service Centres	Ayton Chirnside Cockburnspath Coldingham Gordon Greenlaw Reston Swinton	Clovenfords Lauder Lilliesleaf Newtown St. Boswells/ St. Boswells Stow	Ancrum Denholm Kirk/Town Yetholm Morebattle Newcastleton	Broughton Walkerburn West Linton

FIGURE 4.13 BORDERS REGION:SETTLEMENT HIERARCHY 1991.

TABLE 4.11

BORDERS REGION - HIERARCHY OF SETTLEMENT

(with population at 1991)

District	Berwickshire	Ettrick & Lauderdale	Roxburgh	Tweedale
PRINCIPAL CENTRES		Galashields (13,760)	Hawick (15,710)	
SECONDARY CENTRES	Dunns (2.300) Eyemouth (3,400)	Selkirk (5,950)	Jedburgh (4,080) Kelso (6,040)	Peebles (7,080)
TERTIARY CENTRES	Coldstream (1,740)	Earlston (1640) Melrose (2,270)		Innerleithen (2,500)
LOCAL SERVICE CENTRES (key villages)	Ayton (500) Chirnside (1,200) Cockburnspoth (340) Coldinghan (630) Gordon (410) Greenlaw (580) Reston (290) Swinton (250)	Clovenfords (350) Lauder (1060) Lilliesleaf (220) Newtown & Boswells (1110) St. Boswells (1140) Stow (530)	Ancrun (350) Denholm (550) Yetholm (610) Morebattle (200) Newcastleton (800)	Broughton (270) Wollserburn (660) West Linton (1160)

Source: Borders Region in Figures 1992-93 Edition

4.6.3 The above 35 settlements had a combined population in 1991 of 79,400 or 77% of the population of the Borders Region (14). Settlement populations were calculated by the Regional Council from the Small Area Statistics of the 1991 census and were the result of groupings of Enumeration Districts covering the area of the settlement. It is likely that as a result of the continuing trend through the 1980s of population movement into these towns that a greater proportion of the Borders population now reside in these main settlements (15).

4.6.4 Despite the generally high levels of car ownership which prevail in the Region, a network of bus services will continue to be necessary to service this hierarchy of settlement since the Region is unique in Scotland in that it now contains no railway station open to passenger traffic. The definition of settlement hierarchy in the Regional Structure Plan as a framework for growth implies that a network of public transport routes will link each principal centre with its hinterland. Unconventional public transport can provide an additional, supplementary facility connecting key villages with tertiary centres, secondary centres and principal centres. Thus a hierarchy of bus routes would seem to be the logical result of the definition of the hierarchy of settlement, described above, with innovatory services and experimental schemes linking up the local service centres and key villages.

4.6.5 A Regional settlement policy based on the consolidation of development in identified key settlements, by infilling of appropriate sites within the confines of existing development, should benefit the bus operator in that the market for public transport will be concentrated along established routes and there should be little tendency towards new dispersed development necessitating long and devious routes. The

important role which can be played by unconventional public transport in these remote rural areas is not only as an emergency service and a standby facility, but also a supplementary public transport service meeting the needs of local residents who, because of prevailing high levels of car ownership, only require an infrequent weekly connection with the local market town.

4.6.6 Another factor which seems likely to have accentuated the scale of the problem of the inadequacy of public transport in the remoter rural areas of the Borders Region is the closure of village facilities, including shops and post offices, This can result in the rural population having to travel longer distances to these facilities and has proved an incentive for the further development of unconventional public transport. (16). This trend towards the concentration of shopping provision in larger settlements at the expense of the rural areas, as described above, is likely to increase dependence upon good communications (both public and private transport) between the dispersed settlements of the rural areas and the main towns or principal centres where shopping provision is continuing to be located.

4.6.7 Several geographers, including Nutley (17), Shaw (18) and Phillips and Williams (19), have recognised the widespread phenomenon in rural areas of the decline of rural services, including the closure, because of high unit costs, of small shops, post offices, banks, etc, and the rationalisation of doctors' practices, hospitals and schools into more distant larger units. This may or may not be associated with rural depopulation. The result is that a rural resident's outlet becomes further away, at

the same time as the ability to make the journey by public transport is being diminished.

4.6.8 Any large scale closure of post offices in the rural areas of the Borders could also penalise those elderly persons without private transport who would have to travel to main post offices in the principal centre, as best they could, to collect the pension or transact other essential business. In such circumstances there would be a considerable incentive to develop innovative public transport to meet this need and to help to overcome the deprivation which might be suffered by some of the elderly of the rural community.

4.6.9 Similarly, the concentration of doctors' surgeries, clinical, dental and other medical facilities in the larger principal centres in the Borders Region including the establishment of a single, central Borders General Hospital near Melrose in 1988, is making access to these facilities difficult to the rural population without personal transport who are dependent upon local bus services. The Structure Plan recognises that the accessibility of the Borders General Hospital to the Region's population (particularly in more distant areas such as Tweeddale and Eastern Berwickshire) is critical, and that good road links (particularly on east-west routes) and improved public transport connections are seen as essential to meet this need (20). Thus a basic level of conventional public transport provision, supplemented where necessary by more flexible unconventional public transport arrangements continues to be essential for the smaller number of households (identified above) who are still completely dependent upon it. Access by public transport to the external shopping, employment and service centres of Edinburgh, Carlisle and Berwick-on-Tweed is also

vital for many of the communities of the Borders Region.

4.6.10 The need for supplementary, innovatory public transport seems likely to increase as conventional bus services are withdrawn in both the Highland and Borders Regions due to declining patronage, rising operating costs and the financial pressure now being felt by Scottish Regional Councils to discontinue public transport revenue support. Cut-backs in subsidies to unremunerative bus services have continued in both the Highland and Borders Regions resulting in a decline in vehicle mileage and the withdrawal of some rural routes. This trend towards a contracting public transport network has been accentuated in both Regions by the provisions of the Transport Act 1985. These tendencies and their consequent social problems will be considered in detail in later chapters.

4.7 FUTURE TRENDS

4.7.1 Future trends include the growing ownership and use of the private car (described above), rising bus operating costs, the decline in the number of schoolchildren using scheduled bus services and unemployment among some occupational groups. Unemployment data provided by Borders Regional Council for 1992 shows that in some parts of the Region (eg Berwickshire Travel to Work Area) the unemployment rate reached 13% in 1992 (14). Unemployment will tend to reduce patronage of daily journey to work bus services. All these factors are likely to combine to reduce the number of users of regular scheduled bus services in both the Highland and Borders Region, thus rendering them even less profitable. At the present time it seems likely that the proportion of population of retirement age, as already described above, will increase. This

applied especially to older pensioners in the over 75 years age group. (21). This sector of the population tends to be most vulnerable should a contraction in the public transport system occur. Inconvenience and positive hardship could result to this element of the population if it becomes more difficult, in the context of the implementation of the Transport Act 1985, for the two Regional Councils to continue to sustain services which they have supported since 1975 by means of subsidy.

4.7.2 Thus future trends present a gloomy prospect in the Highland and Borders Regions, for conventional public transport, of declining patronage and greater unprofitability of services resulting, in the absence of subsidy from the Regional Councils, in further cut-backs in vehicle mileage operated. (22)

4.7.3 The potential for the development of unconventional public transport to supplement <u>but not to compete with</u> an inadequate system of conventional bus services in the two Regions would, therefore seem to be considerable where the market for regular bus services is declining and is also intermittent and dispersed. A recently contracting public transport network has left many rural communities in the two Regions without regular, scheduled bus services. (23). Although levels of car ownership in both Regions are generally high, as described above, there remains a relatively small number of households, quantified above, who may still be without access to personal transport. The degree of hardship or inconvenience experienced by these households, now deprived of regular public transport can be great.

4.7.4 Thus the geographical character of both the Borders and the Highland Regions, outlined above, with their generally small and dispersed rural population and settlement pattern, cannot support a comprehensive

commercial network of bus services. The maintenance of a basic bus network and a minimum level of service has been dependent, since the implementation of Section 34 of the 1968 Transport Act, on financial support from the local authority. A subsidised public transport system is thus essential for the maintenance of minimum levels of bus service due to constraints imposed on bus operation by the geographical character of the two Regions. Should this financial support cease, due to economies in public transport revenue support, it seems inevitable that contraction of the network will occur in the two Regions. This dissertation will proceed to examine the potential for the substitution of low cost unconventional public transport as a substitute for regular, conventional bus service in suitable areas after financial support for many regular bus services ceased in the aftermath of the Transport Act 1985.

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CHAPTER FIVE

UNCONVENTIONAL PUBLIC TRANSPORT WITHIN THE CONTEXT OF THE TOTAL PUBLIC TRANSPORT NETWORK IN THE HIGHLAND AND BORDERS REGIONS

5.1 INTRODUCTION

5.1.1 Unconventional public transport supplements the network of conventional bus and rail services. It can be used to fill in gaps which have been created by the contraction of the bus and rail network as well as providing an extension to this network, reaching out from the terminus of the conventional bus route or the railhead to serve remote and isolated communites. In many cases unconventional modes can provide a cheaper alternative form of public tansport to bus and rail services. Their role must, therefore, be seen within the context of the bus and rail network of the two Regions. It will be convenient to examine these issues in the two Regions in turn in order to make a comparative assessment of these geographically separate and contrasting rural areas.

5.2 THE HIGHLAND REGION

(a) Geographical Background

5.2.1 As stated in the previous chapter (Chapter 4) public tranport operation in the Highland Region is constrained by the geographical character of the Region which is one of the most extensive and remote local authorities on the United Kingdom mainland. In this respect the Highland Region is unique in the following ways:-

1. Its sparse and dispersed population and settlement pattern.

2. Its vast geographical extent (2,539,759 hectares) creating long distances between centres of population.

3. The nature of the topography which makes movement in many parts of the Region difficult.

4. The employment structure (predominantly farming, fishing, minerals, forestry and tourism) which prevails in large parts of the Region and militates against the need for daily commuting by public transport.

5. High levels of car ownership which tend to reduce the overall demand for public transport.

5.2.2 For the above reasons it is difficult to provide a comprehensive network of public transport services at a reasonable cost. It is against this geographical background that the Regional Council seeks to fulfill its duty in relation to the provison of public transport services in its area.

(b) Bus Services

5.2.3 Local (stage) services in the Highland Region are provided by 15 bus operators of which the largest is Highland Scottish Omnibuses Ltd. Figure 5.1 shows the network of bus routes which in 1993 served the Highland Region, including postbus routes. The Post Office is also an important additional operator in the Region with 45 services (at May 1993). It is immediately evident from the map that a relatively open network of services prevails with the alignment of routes being constrained by topography. However, postbus routes tend to be less constrained by relief, drainage and the alignment of river valleys and the coastal plain in that, with the widespread use of landrovers with a seating capacity of up to four passengers, they can negotiate steep slopes and ford streams in order to reach remote and isolated rural communities.

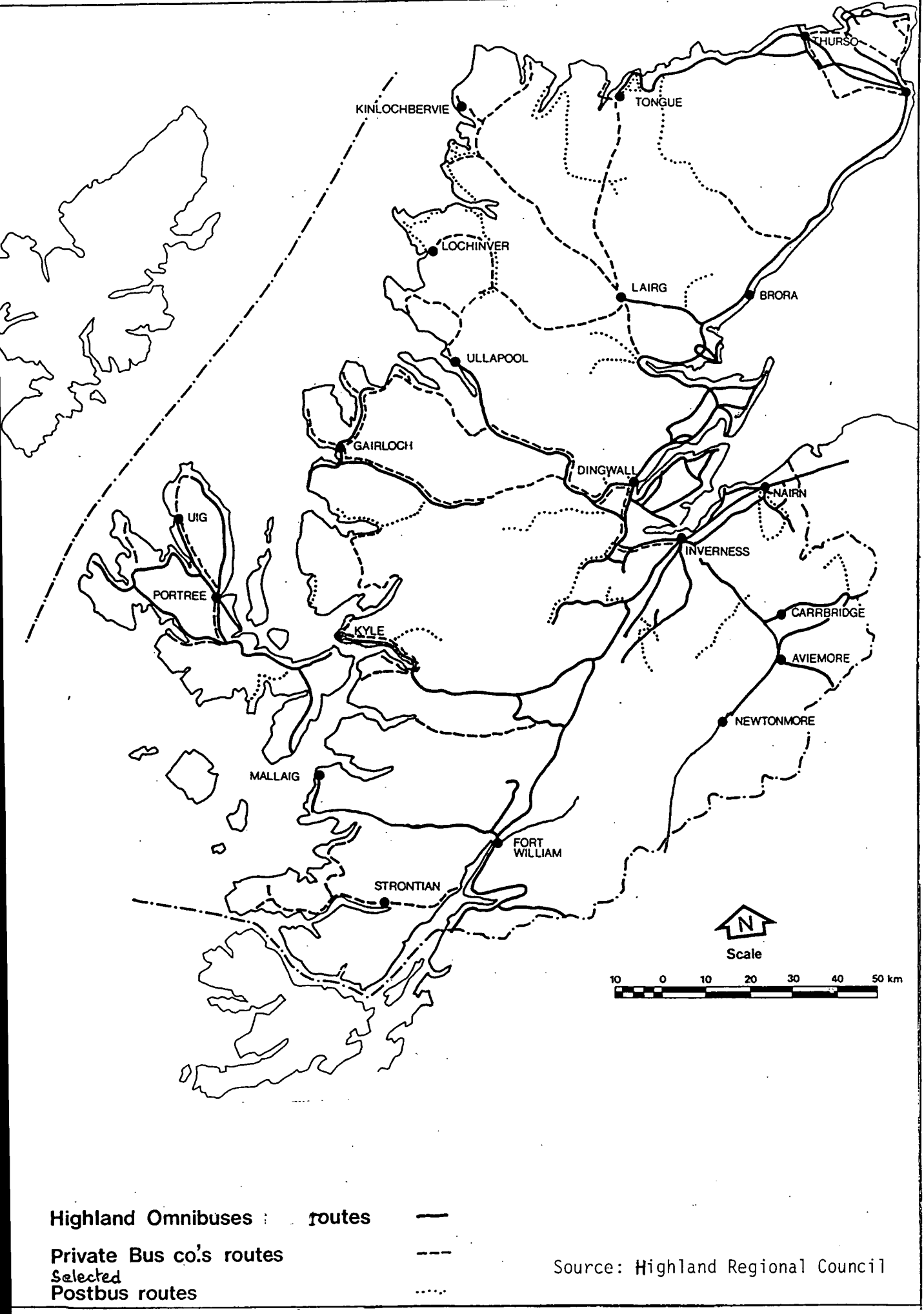


FIGURE 5.1, HIGHLAND REGION: BUS ROUTES 1994.

5.2.4 Figure 5.1 shows that the main nodal point in the bus network of the Region is Inverness which functions as Regional capital. Other local foci of bus services are Thurso, Fort William, Dingwall and Wick. These sub-regional centres also contain town bus services which link outlying suburbs with their central areas.

5.2.5 Bus services are thus the predominant mode of public passenger transport in the Highland Region. In 1991 some 8% of travel to work was undertaken by bus in the Region compared with 0.7% by train and 56% by car (see Table 5.1). Under the terms of the Transport Act 1985, two categories of bus service have emerged. These are:-

1. Commercial services which are operated without subsidy (68 services);
2. Tendered or contract services which are operated with a subsidy from the Regional Council (52 services). This total subsidy is currently (1992-93) £1,004,373 (see Table 5.2).

5.2.6 The Transport Act 1985 brought about a fundamental change in the role of local authorities in providing public transport. Formerly under the provisions of Clause 151(1) of the Local Government (Scotland) Act 1973, it was the duty of Regional Councils in Scotland to develop policies which would promote the provision of a co-ordinated and efficient system of public passenger transport to meet the needs of their area.

TABLE 5.1

HIGHLAND REGION - TRAVEL TO WORK BY PUBLIC AND PRIVATE TRANSPORT 1991 BY DISTRICT

	Percentage travel to work by			
District	**Rail**	**Bus**	**Car**	**Other***
Badenoch & Strathspey	1.0	5.7	46.8	46.5
Caithness	0.8	14.5	48.6	36.1
Inverness	0.5	11.1	57.1	31.3
Lochaber	0.6	9.1	54.6	35.7
Nairn	1.8	3.4	61.2	33.6
Ross & Cromarty	0.6	4.1	61.5	33.8
Skye & Lochalsh		2.0	55.5	42.5
Sutherland	0.2	2.4	52.3	45.1
HIGHLAND REGION	0.7	8.0	56.0	35.4
SCOTLAND	2.8	16.7	56.2	24.3

*"Others" - includes Motor cycle, Pedal cycle, foot, works at home and others.

Source: Census1991

TABLE 5.2.

BUS CONTRACTS IN THE HIGHLAND REGION 1992*93.

No.	Route
500	Newtonmore - Inverness
501	Kincraig - Kingussie via Insh
502	Aviemore - Coire Cas
503	Aviemore - Grantown-on-Spey - Tormore
504	Grantown - Inverness
505	Inverness - Dalcross Airport
506	) Nairn town service
	) Nairn: Delnies Woods - Rosebank & Millbank Schools
507	Whitebridge - Inverness
508	Foyers - Inverness
509	Fort Augustus - Inverness
510	Hughton - Inverness
511	Muir of Ord - Inverness
512	Kiltarlity - Foxhole - Inverness
513	Tomich - Strathglass - Beauly - Inverness
514	) Cromarty - Dingwall
	) Dingwall Primary School Services
515	Contin - Dingwall
516	) Tain - Portmahomack
	) Tain - Shandwick
516A	Tain - Arabella via Balintore
517	Dornoch - Embo
518	Helmsdale - Kinbrace
519	) Clashmore - Tain
	) Lairg - Tain
520	John o'Groats - Thurso
522	Castletown - Wick via Lyth
524	Bettyhill - Reay - Thurso
525	Durness - Lairg
526	Lochinver - Lairg
527	Achiltibuie - Ullapool
528	Lochinver - Ullapool - Inverness
529	Strathcarron - Torridon
531	Kilmaluag - Portree via Staffin
532	Kilmaluag - Portree via Uig
533	Glendale - Portree via Borve
534	) Dunvegan - Portree via Sligachan
	) Portree Local Service
535	Fiscavaig - Portree
536	Peinchorran - Portree
540	Kilchoan - Ardgour
542	Tomich - Inverness via Drumnadrochit
550	Lochailort - Mallaig
551	Acharacle - Fort William via Lochailort
552	Roy Bridge - Fort William
553	Fort William High Street - Inverlochy & Claggan (evenings)
554	Fort William High Street - Plantation & Upper Achintore (evenings)
555	Fort William High Street - Plantation, Inverlochy & Claggan
601	Nairn: Tradespark - Rosebank School
602	Inshes Wood - Culloden Academy
603	Inverness: Town Centre - Royal Academy via Holm Mains
604	Tomich - Glen Urquhart High School
605	Cononbank Farm - Inchmore School
607	Mount Vernon - Thurso High School
621	Upper Achintore - Lochaber High School, etc
622	Fort William High Street - Lochaber High School, etc
623	Plantation - Lochaber High School, etc
624	Inverlochy - Lochaber High School, etc

Source; Highland Regional Council.

5.2.7 This duty was abolished (with effect from 6 January 1986) by the Transport Act 1985. Under the provisions of Clause 63(2) of the Transport Act 1985 it is now the duty of the Regional Council in Scotland "to secure the provision of such public transport requirements within their area which would not in their view be met apart from any action taken by them for that purpose".

5.2.8 The Highland Regional Council, with the co-operation of the operators, has also had considerable success with the integration of school bus contracts and public bus service contracts. This has been done, except where the number of school pupils is too great, by timing public bus services to suit school requirements (thus avoiding the need for separate school contracts exclusively for the movement of schoolchildren). In this way it has proved possible to make school contract services available to the travelling public. (1)

5.2.9 This integration of school and general public transport has benefited the Regional Council in two ways:-

1. It has helped to reduce the price of school contracts;
2. It has reduced the cost of transporting schoolchildren since the cost of season tickets on a public bus service is generally lower than the cost of a separate school bus contract.

Thus the bus network of the Highland Region is currently (1993/94) substantially a network serving the needs of schoolchildren who provide numerically the largest number of passengers. It is thus largely supported financially by the Local Education Authority who have a statutory duty to provide transport for all schoolchildren residing beyond

certain minimum distances from school. The important role of school transport in both the Highland and Borders Regions will be described in detail in a later chapter.

5.2.10 However, some bus services in the Highland Region have been enhanced following de-regulation under the terms of the Transport Act 1985. New long distance express coaches have also benefited some areas located along their route by providing an intermediate service for local residents. In addition, the cost of subsidy to the Regional Council has been reduced from £1,191,738 pre-deregulation to £1,004,373 in 1992-92, a saving of £187,365 (2).

5.2.11 The Highland Regional Council is currently committed in its Structure Plan 1990 (Policy P.79) to:-

1. Support the retention and improvement of public transport links within and into the Region.
2. Press for closer integration of public transport services.
3. Award contracts to bus services according to the needs of service users. (3)

5.2.12 Thus the Highland Region is served by an extensive and open network of bus routes whose patronage and economics of operation are constantly being monitored by the Regional Council in order to maintain minimum levels of service and basic bus network in the remoter rural areas. The tool used to achieve this policy is the award of subsidy through the process of competitive tendering. The network of bus services in the Region thus comprises a basic skeleton of commercial routes operated without a subsidy, supplemented by additional socially necessary but unprofitable services which are supported by the Regional Council. These networks of commercial and contracted (subsidised) services

are shown in Figures 5.2 and 5.3. In this way the shape of the bus network in the Highland Region has remained relatively unaltered since the implementation of the Transport Act 1985, although there have been some minor adjustments to frequency of service and "tinkering with the network" in the Inverness area in order to meet changing passenger demand. The bus network has thus been maintained substantially in its pre-deregulation form during the period 1985-93 due to the efforts of the Regional Council who have been concerned to safeguard socially necessary, but unremunerative, routes for the benefit of isolated rural communities.

5.2.13 As previously stated, the main passengers carried on the bus network are schoolchildren. In fact, it may be argued that the network is essentially a school bus network supported by grants from the Local Education Authority. Another feature of the network is the seasonal variation in the number of passengers carried with a distinct peak in the tourist season when local patronage is supplemented by visitors to the Region. This seasonal variation in demand is reflected in the operation of a number of summer-only routes and the general improvement of bus service frequencies in summer.

(c) The Rail Network

5.2.14 Figure 5.4 shows the network of rail routes and stations in the Highland Region at 1992-93. This network is composed of 400 route miles with 58 stations open to passenger traffic. Train services into and within the Region represent an important element of the Regional transport system, at both local and strategic level. Passenger journeys starting and terminating at manned stations in the Region were as follows during the period 1978-1983, the latest period for which separate data is available (see Table 5.3).

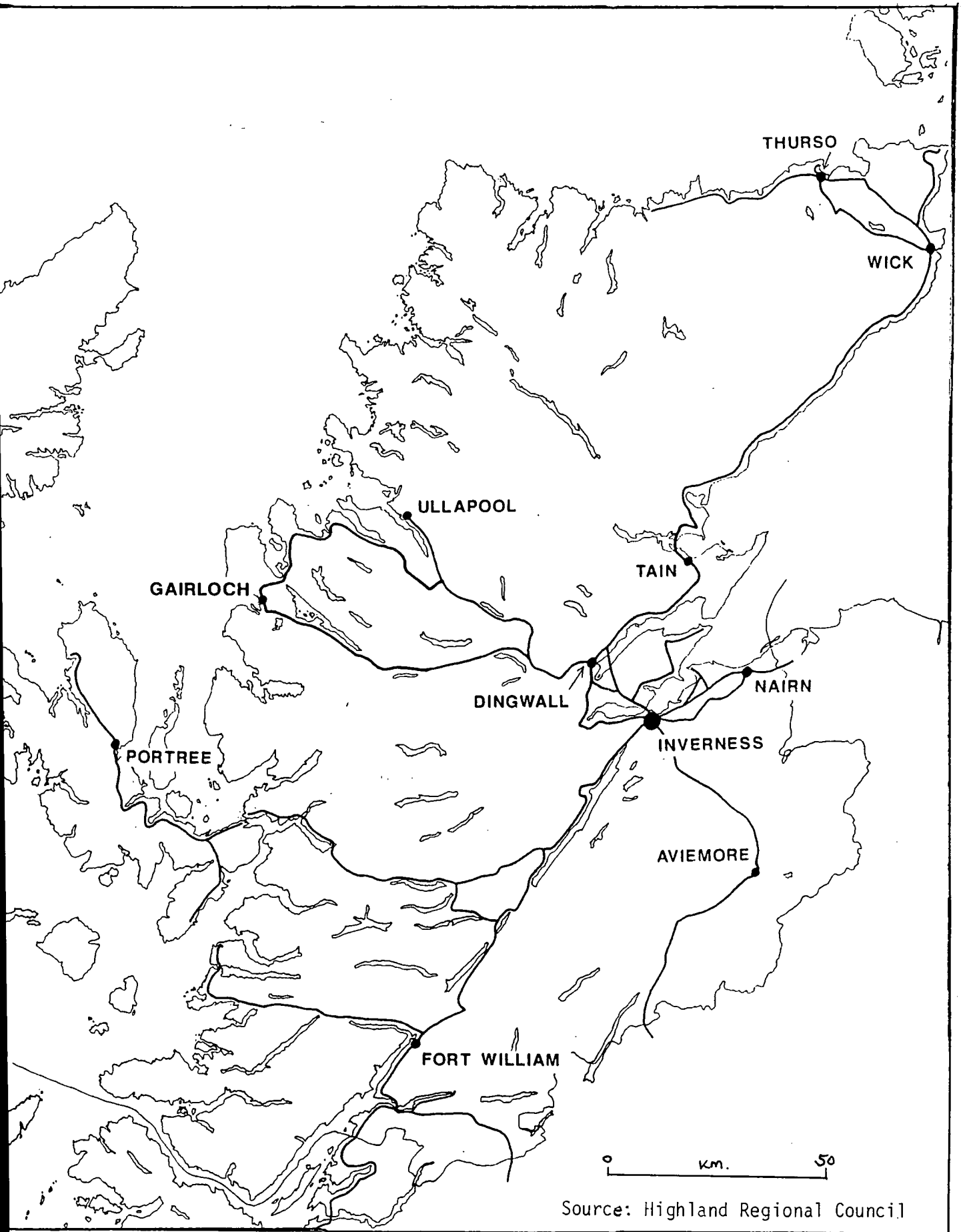
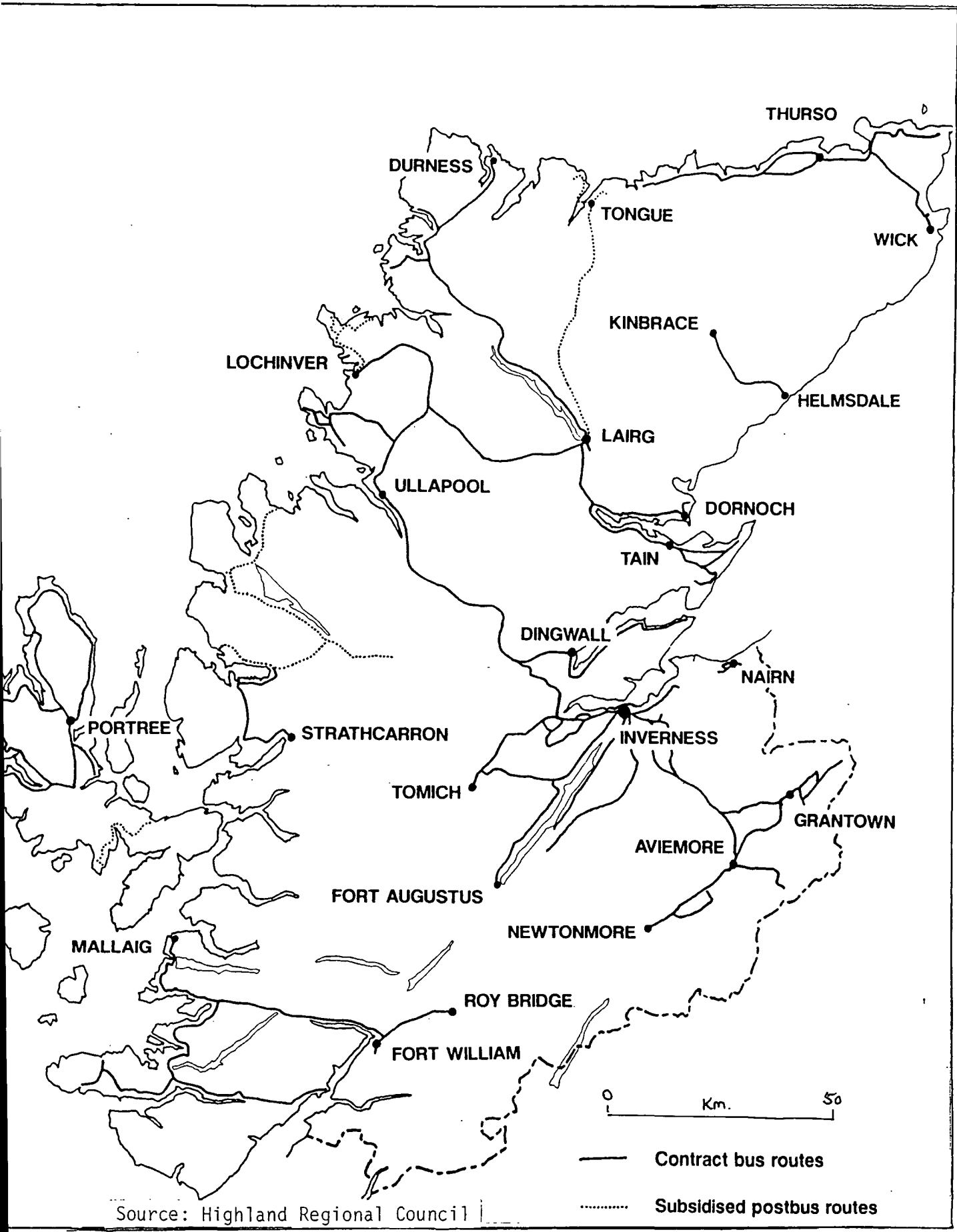
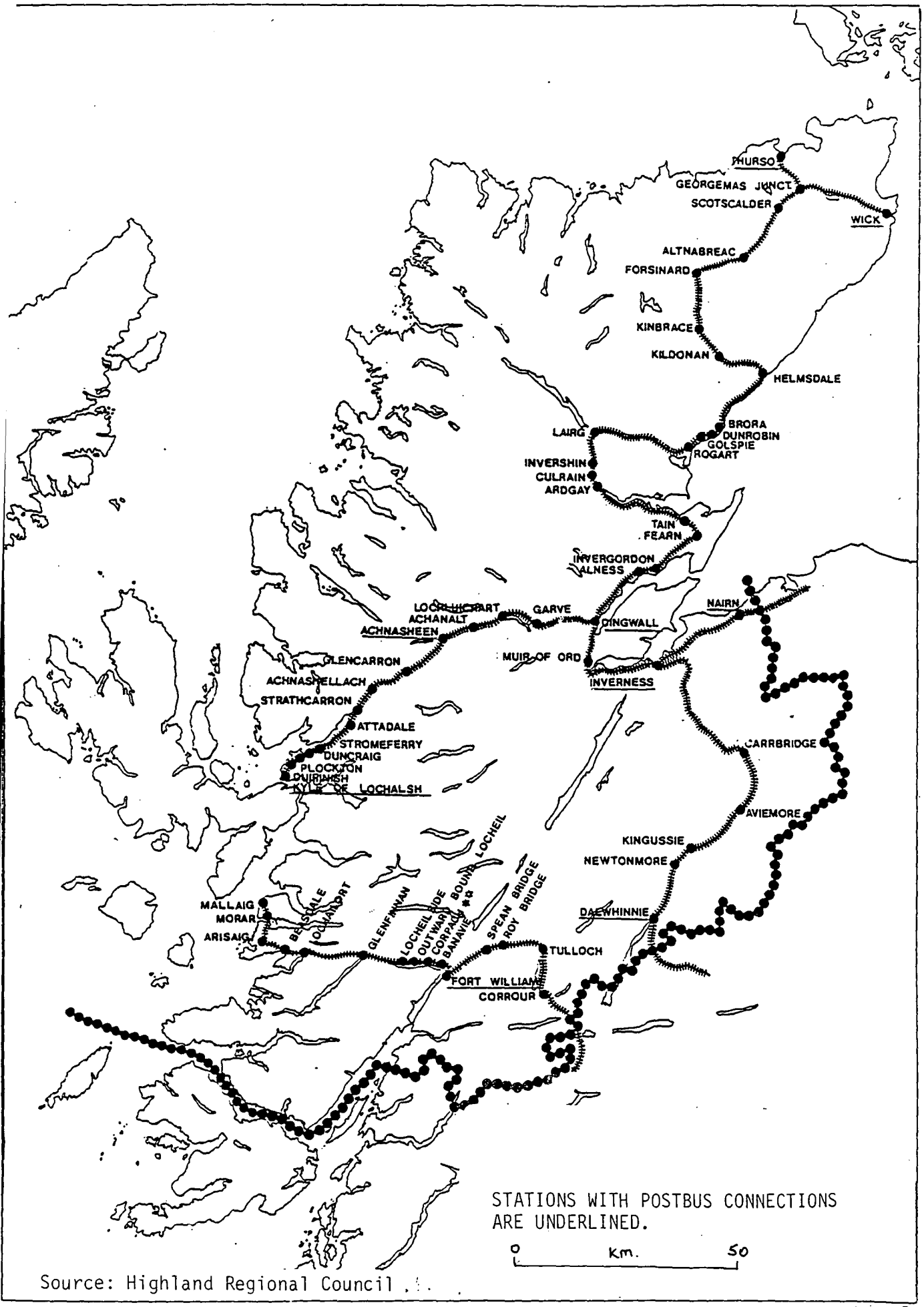


FIGURE 5.2 HIGHLAND REGION:MAIN COMMERCIAL BUS ROUTES 1994.



Source: Highland Regional Council

FIGURE 5.3. TENDERED, CONTRACT BUS ROUTES (TRANSPORT ACT 1985) IN 1994.



Source: Highland Regional Council

FIGURE 5.4.HIGHLAND REGION:BRITISH RAIL STATIONS 1994.

TABLE 5.3

HIGHLAND REGION - BRITISH RAIL STATIONS.
PASSENGER JOURNEYS STARTING AND TERMINATING AT STATIONS 1978-1983

Route	1978	1979	1980	1981	1982	1983
Inverness - Perth	623,642	586,468	571,422	582,243	508,974	572,498
West Highland Line	146,809	103458	123,334	131,292	113,258	139,428
Inverness - Wick - Thurso	168,834	170,282	188,808	188,474	180,196	148,240
Inverness - Kyle of Lochalsh	39,203	34,655	32,320	34,756	34,164	33,355
TOTAL JOURNEYS	978,488	894,863	915,884	936,765	836,592	893,521
TREND : 1978 =100	100	92	94	96	85	91

Source: Highland Regional Council

5.2.15 Table 5.3 shows that during the period 1978-83, immediately prior to bus service de-regulation, patronage of Highland Region railway services oscillated, but generally registered a decline of 9%. Comparable separate statistics are not available for the period since 1983. There was, therefore, an overall annual decline in patronage of 9% between 1978-83. The above passenger statistics help to quantify the volume of passenger traffic originating and terminating at stations throughout the Region. It is evident from Table 5.3 that rail services perform a valuable role for both local journeys as well as intercity journeys. Rail services thus have an important local as well as a strategic role for the movement of passengers.

5.2.16 The geographers, Lea, Gordon and Bowles (5), point out that in the Highland Region the justification for the retention of the rail network rests less on economic and more on social grounds. In spite of tourist traffic the long railway lines to remote western or northern coastal towns and island ferry ports do not pay their way. These lines are, nevertheless, essential lifelines for many communities in remote parts of Scotland where any form of public transport would be uneconomic. As long as they continue to carry a reasonable volume of traffic a strong case exists for the continued subsidy of such lines. Similar arguments for the retention of rural railway lines have been made by Kilvington (6), Whitelegg (7) and Nutley (8) who have also stressed that the social costs of closure of such lines can be much more profound than any financial savings achieved.

5.2.17 The dual function of the railways of the Highland Region as both local and strategic routes was recognised by British Rail in 1989 by the introduction of "Super Sprinter" trains on the following

routes. These trains are ideally suited to carry both local as well as long distance passenger traffic.

Glasgow - Fort William - Mallaig.
Inverness - Wick - Thurso.
Inverness - Kyle.
Inverness - Aberdeen.

5.2.18 The strategic role of the rail network as a means of linking the Highland Region with the rest of the United Kingdom mainland and overcoming its remoteness and geographical isolation was addressed by British Rail with the introduction of new "Express Trains" on the following intercity services in May 1990.

Inverness - Edinburgh.
Inverness - Glasgow.

5.2.19 Until about 1990 the railway system was a major transporter of mail throughout the Highland Region. This was redistributed to isolated and remote rural communities by postbus services and postal vans which linked these communities with the railhead. Postbus services have thus performed an important role as extensions of the rail network. However, since about 1990 mail has been increasingly brought into the Region from the south by air (first class mail) or by road vehicles owned and operated by the Post Office (second class mail).

5.2.20 Implementation of the Railways Act 1993 began from 1 April 1994 when ownership of track, stations and other structures passed from British Rail to a new publicly owned limited company, "Railtrack," which is responsible for overall safety, for control of train operations and, therefore, for compilation of the

national timetable. Railtrack will lease all stations, with the exception of Glasgow Central and Edinburgh Waverly to the train operating companies. The government has decided to franchise Scotland as a single entity. This decision will be important for the continuation of the life of lines in the north of Scotland where franchising would be on the basis of the May 1994 timetable.

5.2.21 In this context the Regional Council has adopted a strong stand against any possible reduction in the level of service that migh ensue (10). Thus in order to preserve a viable and essential railway service in the Highlands, it is considered necessary to:-

1. Retain all existing lines and stations in the Region.
2. Maintain, with no dinumition, current levels of service recognising the social and commercial needs of the area.
3. Continue to improve services to encourage and cater for growth of the local economy.
4. Maintain fares at a reasonable level bearing in mind the long distances involved.
5. Provide adequate subsidies to enable these needs to be met.

5.2.22 The rail network of the Highland Region is entirely rural in character bringing little or no profit to any potential operator and the council would wish to be assured that the entire network will be regarded as a social necessity and that central government will undertake to provide whatever subsidy is necessary to maintain the present level of service on each of the routes in the network.

5.2.23 Policies for rail services currently being adopted by the Regional Council may be summarised as follows. (9)

1. The Council will press for the retention and improvement of all existing rail services, particularly with regard to speed, punctuality and comfort.
2. The Council will encourage the continued introduction of modern rolling stock on all Highland lines.
3. The Council will continue to support British Rail in its efforts to improve the infrastructure of the Highland rail system.
4. The Council will encourage maximum use of rail services.

In short, the Council regards the entire rail network as a "social necessity". (10)

5.2.24 The Regional Council's role with regard to rail services, however, differs significantly from its role with regard to bus services in that the Council is not involved in contract payments to maintain services. Its role tends to be confined in the latter case to negotiations with British Rail regarding such matters as level of service, time-tables, fares and future developments. The Council makes annual payments (currently £50,000 a year) to British Rail to help with infrastructure improvements.

5.2.25 In conclusion, what is the role of unconventional public transport in the context of the rail network of the Highland Region? It is evident that it can perform a supplementary role as a feeder service to stations along the rail network and hence to some extent function as an extension of the rail system. In 1993-94 there were 12 postbus routes which inter-

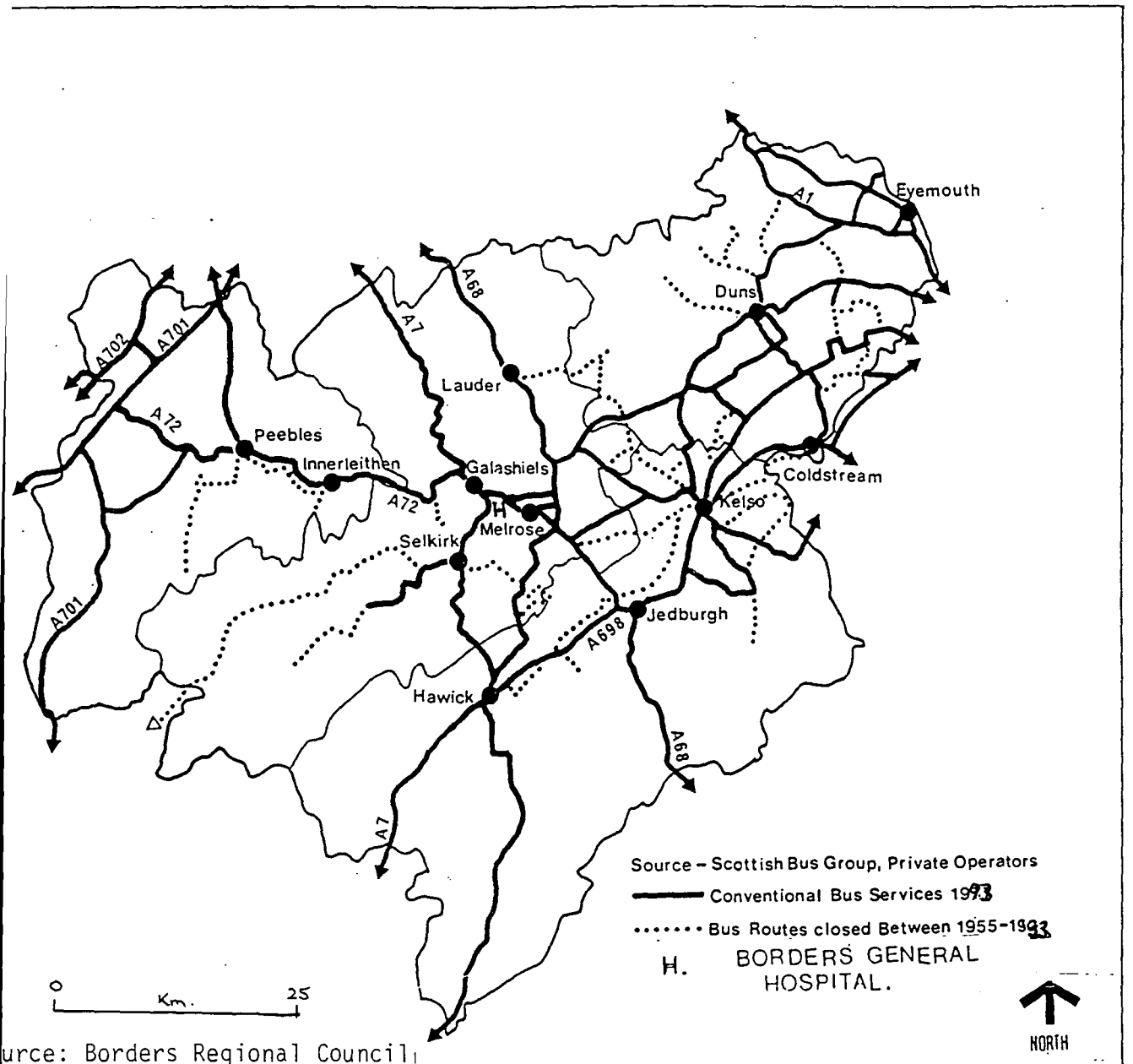
connected with their local railway station. A total of eight railway stations (shown in Figure 5.4) acted as "Gateway Stations" to postbus services at that time. These stations were Inverness, Nairn, Dingwall, Thurso, Wick, Achnasheen, Kyle and Fort William. Thus unconventional modes of public passenger transport can provide a supplementary service to the rail network in certain areas and function as an extension of the rail system linking remote and isolated communities with their local railway station.

5.3 PUBLIC TRANSPORT IN THE BORDERS REGION

5.3.1 In a rural Region such as the Borders with a dispersed settlement pattern and scattered population, the provision of adequate public transport facilities is a key factor in its growth and development. As a result of the piecemeal closure of its former local rail network, by 1969 the Borders was completely dependent upon road passenger transport.

(a) Bus Services

5.3.2 The Borders Region is thus unique in mainland Scotland in having to rely solely on buses for local public transport. Services are run by seven operators (including the Post Office) of which the largest is Lowland Omnibuses Ltd. Together these operators ran 3,43 million vehicle miles in 1993. The network of bus routes is shown in Figure 5.5. This network includes local interurban and long distance services. The dispersed settlement pattern of the Region means that bus routes are not focused on any single major urban centre. Medium sized towns tend to be fairly uniformly distributed throughout the Region resulting in an even network of bus routes with no single focal point in the network. In 1991 only some 5% of travel to work was



urce: Borders Regional Council

FIGURE 5.5 BORDERS REGION:PUBLIC TRANSPORT 1955-1993.

TABLE 5.4

BORDERS REGION - TRAVEL TO WORK BY PUBLIC AND PRIVATE TRANSPORT 1991 BY DISTRICT

	Percentage travel to work by			
District	Rail	Bus	Car	Other*
Berwickshire	0.2	3.9	50.2	45.7
Ettrick & Lauderdale	0.2	5.3	58.5	36.0
Roxburgh		4.4	49.3	46.3
Tweedale		4.6	53.9	41.5
BORDERS REGION	0.1	4.6	53.1	42.2
SCOTLAND	2.8	16.7	56.2	24.3

*"Others" - includes Motor cycle, Pedal cycle, foot, works at home and others.

Source: Census 1991

by bus compared with 53% by car and some 0.1% by train (see Table 5.4). Thus the bus has performed only a secondary role for the daily journey to work, the private car being the predominant mode of transport used by commuters.

5.3.3 The total number of bus vehicle-miles operated has, surprisingly, increased from 3.20 million in 1986 (immediate post-deregulation) to 3.43 million in 1993, an increase of 7%. Table 5.5 shows changes in vehicle mileage of both commercial (non-subsidised) and tendered (subsidised) bus services in the Borders Region during the period 1986-93. (11)

TABLE 5.5

BORDERS REGION - TRENDS IN VEHICLES MILES OPERATED 1986 - 1993 (millions)

	1986	1987	1988	1989	1990	1991	1992	1993
Total Vehicle Miles	3.20	3.28	3.39	3.36	3.49	3.44	3.5	3.43
Commercial Vehicle Miles	1.95	1.96	1.91	1.88	1.78	1.74	1.74	1.77
Tendered Vehicle Miles	1.25	1.30	1.48	1.48	1.71	1.70	1.71	1.66
Number of Contracts	40	44	50	50	48	48	43	41

Source: Borders Regional Council

5.3.4 It is evident from this Table that in 1993 tendered (subsidised) services constituted approximately half (48%) of all vehicle-miles operated in the Region. The bus network has, therefore, remained relatively intact to a large extent, due to the efforts of the Regional Council to support unremunerative, but "socially necessary" services by subsidy.

5.3.5 In 1993/4 a total of £2,440,000 was spent by the Regional Council in supporting unprofitable, but socially necessary services. This comprised £648,000 in subsidies to local bus services, £198,000 on concessionary fares and £1,594,000 on school and college transport (see Table 5.6). (12)

TABLE 5.6

BORDERS REGION - EXPENDITURE ON BUS SERVICES
1987/88 to 1993/94
(£ Million)

	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
Net Cost of Subsidy	437	563	562	696	677	526	648
Concessionary Fares	138	107	137	151	179	184	198
School and College Transport	1130	1148	1233	1299	1474	1552	1574
TOTAL	1705	1818	1926	2146	2330	2262	2440

Source: Borders Regional Council

5.3.6 The Regional Council is, therefore, committed in its Transport Policies and Programme to continue to monitor and review the use of bus services throughout the Region. (13) Recent surveys and consultations have revealed problems of poor bus access between the central Borders and specifically the new Borders General Hospital (at Huntlyburn near Melrose) and eastern Berwickshire. A new Borders Rail Link coach service was introduced between Galashiels and Berwick-upon-Tweed in 1991 as a strategic service providing a long distance trans-Regional link giving access to intercity rail services at Berwick-upon-Tweed. It also gives access to the Borders General Hospital and could be used by local residents for work, school, college and shopping journeys. This new Rail Link was additional to the Galashiels - Hawick - Carlisle Rail Link introduced in 1982. A third Rail Link service is currently being provided (in 1994) between Galashiels and Edinburgh (Waverley) station.

5.3.7 The relatively low density of population and the absence of any single, major regional centre in the Borders results in many people having to make journeys to reach centres outside the Region, such as Edinburgh, Carlisle and Berwick-upon-Tweed, which possess a wide range of education, medical, shopping, recreational and social facilities. This

trend has been reinforced by the continuing centralisation of commercial facilities and services in fewer towns and villages during the last decade. (14). For these reasons the provision of public transport, supplemented where necessary by unconventional services, is vital for those households which do not have access to a private car. Table 5.7 lists the 41 tendered bus services which are currently subsidised by the Regional Council in order to maintain a minimum level of public transport provision in rural areas.

TABLE 5.7.

BORDERS REGIONAL COUNCIL

PUBLIC TRANSPORT CONTRACTS : BUS MILES PER ANNUM & CONTRACT PRICES Revised wef 01/08/94

	CONTRACT	OPERATOR	ENDS	BUS-MILES Per Annum	CONTRACT PRICE Per Annum	Per Month
500	Harrier Services	Lowland	29/09/94	5,920	5,443	1,814.33a
901	Harrier Service	Austin	29/09/94	1,300	1,820	606.67a
235	St Abbs - Berwick 0730 M-F	Cross-Country Connexions	26/03/95	7,280	2,080	173.33
181	Kelso - Morebattle/Yetholm	Lowland	30/07/95	29,100	17,076	1,423.00
182	Kelso - Coldstream - Duns	Lowland	30/07/95	11,400	6,404	533.67
183	Kelso - Sprouston	Lowland	30/07/95	9,240	10,566	880.50
185	Kelso - Leitholm - Greenlaw - Duns	Northumbria	30/07/95	33,500	20,768	1,730.67
187	Kelso - Swinton - Berwick	Northumbria	30/07/95	8,300	5,144	428.67
194	Newcastleton - Hawick	Telford	30/07/95	55,500	24,504	2,042.00
223	Kelso - Berwick (Sundays)	Lowland	30/07/95	6,000	2,775	231.25
281	Kelso - Yetholm at 0650	Lowland	30/07/95	6,240	1,300	108.33
303	Edinburgh - Biggar (Sundays)	Wilsons	30/07/95	9,200	2,678	223.17
320	Hawick - Kelso	Lowland	30/07/95	109,000	53,362	4,446.83
195	Galashiels - Carlisle (Raillink)	Lowland	May 1996	270,400	83,646	6,970.50
115	Hawick - Lilliesleaf - Melrose	Munro	28/07/96	27,200	15,423	1,285.25
192	West Linton - Peebles	Lowland	28/07/96	18,900	13,264	1,105.33
193	Newcastleton - Longtown	Telford	28/07/96	19,700	24,985	2,082.08
204	Dunbar - Cockburnspath	Lowland	28/07/96	28,300	7,814	651.17
135	Berwick - St Abbs (Su-Th evenings)	Cross-Country Connexions	28/07/96	29,120	7,057	588.08
304	Berwick - Dunbar (Sundays)	Lowland	28/07/96	4,200	1,439	119.93
335	Berwick - St Abbs (Su daytime)	Cross-Country Connexions	28/07/96	11,650	2,566	213.83

TABLE 5.7

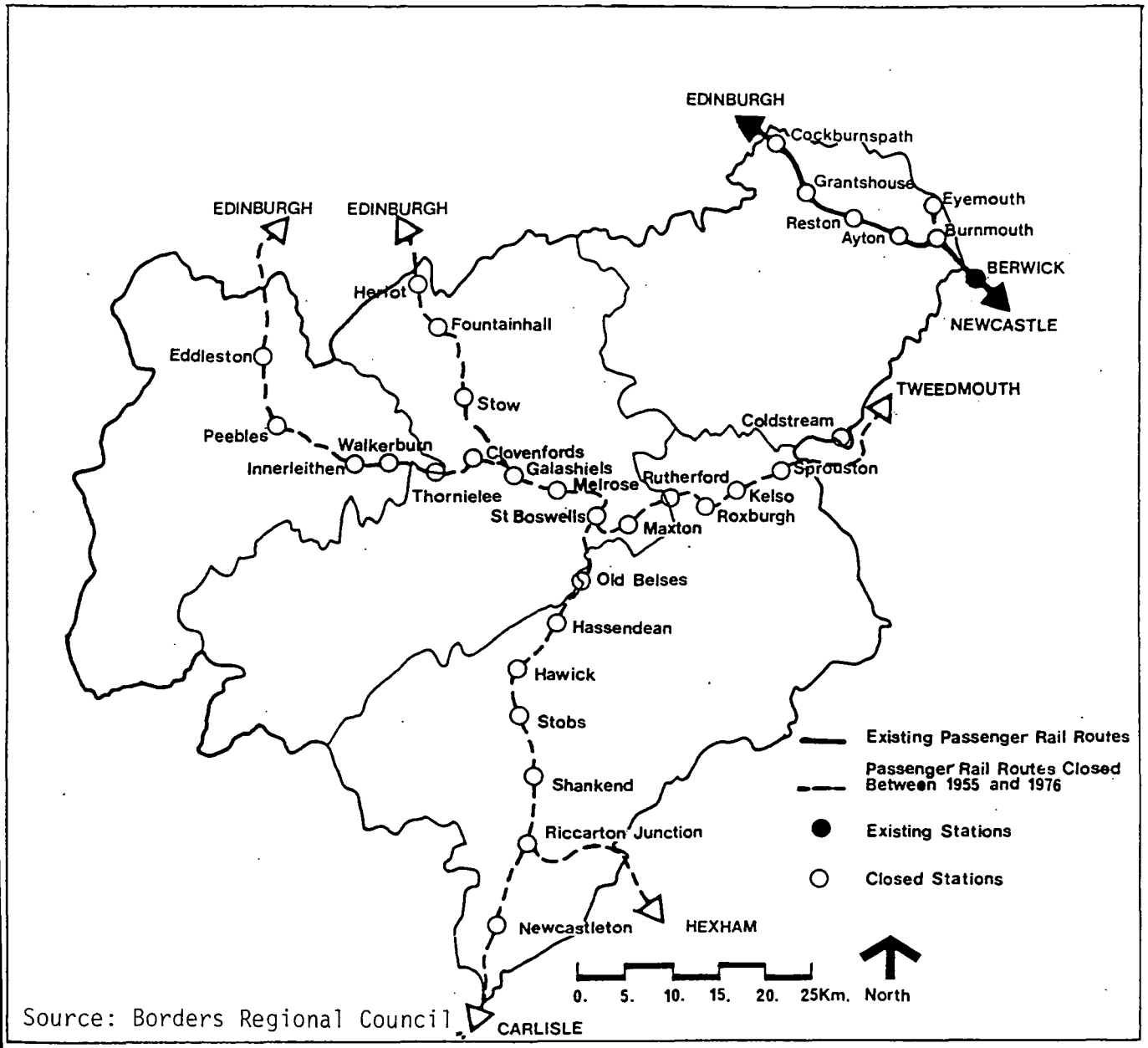
	CONTRACT	OPERATOR	ENDS	BUS-MILES Per Annum	CONTRACT PRICE Per Annum	Per Month
Courier Services		Austin	06/04/97	190,000	170,717	14,226.42
132	Berwick - Swinton	Lowland	/05/97	17,500	8,750	729.17
134	Berwick - Eyemouth - Duns	Lowland	/05/97	72,500	35,400	2,950.00
232	Berwick - Swinton - Duns	Lowland	/05/97	11,250	25,450	2,120.83
123	Kelso - Berwick (weekdays)	Swan's Coaches	27/07/97	106,500	21,438	1,786.50
129	Jedburgh/Kelso - Edinburgh	Lowland	27/07/97	130,000	72,000	6,000.00
159	Galashiels - Melrose	Lowland	27/07/97	36,140	30,000	2,500.00
165	Galashiels - St Boswells/Earlston	Lowland	27/07/97	89,330	72,000	6,000.00
168	Galashiels - Jedburgh	Lowland	27/07/97	48,600	42,000	3,500.00
186	Kelso - Swinton - Duns	Lowland	27/07/97	21,600	29,000	2,416.67
176	Selkirk - Melrose	Austin	02/08/98	66,400	40,347	3,362.29
260	Berwick - Duns - Co'path	A Wait & Son	02/08/98	47,000	25,565	2,130.42
160	Galashiels - Berwick (Raillink)	Lowland	/05/99	194,700	112,045	9,337.83
114	Bonchester Bridge - Hawick	Munro	de min	1,900	2,170	180.83
199	Dumfries - Broughton - Edinburgh	MacEwan	de min	32,800	8,506	708.83
203	Penicuik - West Linton	MacPherson	de min	5,900	5,283	440.25
293	Newcastleton - Carlisle	Telford	de min	13,000	3,430	285.83
295	Hawick - Galashiels	Lowland	de min	10,200	5,577	464.75
323	Coldstream - Kelso (Saturday am)	Lowland	de min	2,000	1,045	87.08
423	Coldstream - Kelso (Saturday pm)	Northumbria	de min	2,300	1,580	131.67
Christmas/New Year Services		Lowland	de min		3,500	3,500.00b
Boxing Day Service enhancement		Lowland	de min		5,160	5,160.00b

(b) Rail Services

5.3.8 Figure 5.6 shows how the once extensive network of railways within the Borders Region has now completely disappeared with the exception of the east coast main line (electrified since 1992) which runs for 18 miles through the eastern part of the Region. The final local service to close was the Waverley Route, between Edinburgh, Galashiels, Hawick and Carlisle, on 6 January 1969 leaving the Region without any stations open to passenger traffic. This means that railway journeys undertaken by local residents must start or finish at railheads such as Edinburgh, Carlisle and Berwick-upon-Tweed. This involves journeys of considerable length from settlements in the Borders and it is estimated that only 28% of the population of the Region live within 20 miles of a major railhead. (15) There is, therefore, a heavy reliance on bus services to connect the main settlements in the Borders with the major passenger railheads and the main intercity train services outside the Region.

(c) Unconventional Services

5.3.9 The unique Borders Courier Service which involves the use of multi-functional vehicles to carry both passengers and parcels (in this case medical supplies between hospitals and surgeries) has continued to operate with a subsidy from the Regional Council and the Borders Health Board since 1979. As a result the courier service fulfils an important role as a supplementary public transport facility. Some minor adjustments were made to the four courier routes in 1992 to meet the needs of the Borders Health Board for the transportation of medical supplies. The role and services of the Border Courier and its contribution to the public transport



Source: Borders Regional Council

FIGURE 5.6 DISUSED RAILWAY LINES IN THE BORDERS REGION.

system of the Region will be described in detail in a later chapter.

5.3.10 The foregoing description of public transport facilities in the Borders Region will have shown that many communities may have the benefit of more than one of these innovatory services. Although each service taken in isolation provides only a minimal service, taken together they provide a way by which travellers can undertake a range of journeys for different purposes to different destinations and at different times of day. The Regional Council is, therefore, committed in its Transport Policies and Programmes to consider the contribution which can be made to transport services by both conventional and unconventional forms of transport as well as the role of the Council's own vehicle fleet and the assistance of the voluntary sector. It is thus very interested in providing secondary services tailored to the particular needs of the elderly and disabled who are unable to use the commercial bus network. (17)

5.4 CONCLUSIONS

5.4.1 Thus the role of unconventional public transport in the Highland and Borders Regions must be examined within the context of the network of conventional bus and rail services. In such a context there may be further scope for experimentation with other forms of public passenger transport as a low cost alternative to subsidised conventional bus services. Later chapters will describe such developments.

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15 BORDERS REGIONAL COUNCIL (1980) Structure Plan 1980. Page 49. Para 7.12.

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CHAPTER SIX

A SURVEY OF PUBLIC TRANSPORT NEED WITH SPECIAL REFERENCE TO THE BORDERS AND HIGHLAND REGIONS

I. THE BORDERS REGION

6.1 INTRODUCTION

6.1.1 Section 11 (2)(a) of the Transport Act 1978 dealing with the preparation of Public Transport Plans states that:

> The Plan shall contain a review of the County's needs and the needs of communities comprised in it in respect of public passenger transport services and the extent to which these needs are met by existing services.

The approved Transport Policies and Programmes (TPP) prepared annually by the Regional Councils of Scotland since 1975 are the Scottish equivalent of the Public Transport Plan prepared by Shire Counties in England and Wales.

6.1.2 The objective of this chapter is to review the type of need for public transport which prevails in predominantly rural Regions such as the Borders where some 43% of the population resided in settlements of under 2,500 population in 1991. It recognises, however, that the number of people completely dependent upon public transport is small and that the majority of the population of the Region solve their transport needs quite adequately by using private transport. For example, in 1991 only 5% of all journeys to work within the Borders Region were by bus and some 53% were by private car. (1) In the Borders Region the level of car ownership is the highest in mainland Scotland (0.39 cars per head in 1991) and is continually rising with reducing dependence on public transport.

6.2 IDENTIFICATION OF NEED

6.2.1 The definition of public transport needs may be considered in relation to the need for different groups of individuals in different circumstances to have access to particular types of facility or centres of activity. These include:

1. The need for the elderly to have access to shopping and health facilities.
2. The need for housewives to be able to reach shopping centres.
3. The need for young people to have access to jobs and evening education or recreational activities.
4. The need for school children to have access to school.
5. The need for persons of working age to have access to their place of work.
6. The need for the disabled and handicapped to have access to health, shopping and recreational facilities.
7. The need to have access to places of worship, hospitals for visiting or recreational facilities on Sundays.

6.2.2 Thus, the fundamental issue is whether public transport services provide a means of reaching these facilities and to identify those needs which can be considered most essential or basic, bearing in mind that financial support for public transport is limited and it is usually impossible, due to financial constraints, to provide a fully comprehensive bus service that embraces <u>all</u> the needs listed above.

6.2.3 The extent and nature of the needs of any particular community for public transport are likely to depend

upon the following in the Borders Region, as elsewhere in rural Scotland.

1. The social structure of the community itself in terms of age, activities and life style of residents.

2. The location of the community in relation to different facilities and centres of activity, including the availability of local facilities and the degree of competition between different centres.

3. The mobility of the community in terms of levels of car ownership and the availability of personal transport.

6.3 **MINIMUM LEVELS OF SERVICE**

6.3.1 Para 14 of Department of Transport Circular 8/78 "Transport Act 1978 - Public Transport Planning in Non-Metropolitan Counties", while discussing public transport needs, states that the criteria used in determining the needs of communities for public transport should be set out with an account of any work being done to refine them. It looks forward to defining generally acceptable principles on which to assess needs for public transport, eg in terms of minimum levels of service, as a longer term measure. (3) Likewise, Department of Transport Circular 1/77 (Transport Supplementary Grant Submissions for 1978/79) Para 14 states that "within the total resources available for bus revenue support, priority should be given to the need to maintain minimum levels of service in less populated areas where the problem of mobility is most severe".

6.3.2 In the context of reductions in revenue support available for socially necessary tendered bus services since the implementation of the Transport Act 1985, it will obviously become necessary for Regional councils to define what constitutes a basic minimum service below which services should not be

allowed to deteriorate further. The definition of such a basic public transport network will obviously be dependent on defining which of the needs listed in Para 6.2.1 above are most essential and would merit financial support and which are expendable and of lower priority. Thus, it becomes necessary to identify PRIMARY NEEDS, the meeting of which financial support for public transport should be channelled and SECONDARY NEEDS which are of low priority and which would not merit financial support in the context of limited resources for subsidy for public passenger transport.

6.4 **DEFINITION OF A HIERARCHY OF NEEDS**

6.4.1 An assessment of public transport need was undertaken by Dyfed County Council in their Public Transport Plan (Dyfed County Council - Public Passenger Transport Plan 1980-85 Chapter 3). (4) The methodology adopted by Dyfed, a rural county with a relatively low population density and dispersed settlement pattern similar to the Borders Region, can usefully be applied, with modifications to the Borders. Other studies of the definition and measurement of public transport needs have been made by Banister (5) and (6). Other researchers into this question have been Kilvington (7) and Peat, Marwick and Mitchell (8). In fact, the writer has also made his own contribution towards the identification of different needs for public transport and the definition of what might constitute a basic public transport network and a minimum level of public transport provision in rural areas. (9).

6.4.2 It is obviously essential first of all to define what are the primary as opposed to the secondary needs for public transport. It is suggested that the following ranking of needs could be applied to the Borders Region of Scotland.

I PRIMARY NEEDS FOR PUBLIC TRANSPORT

Transport Need	Population Served	Access to	Frequency of Local Bus Service
School	School children of 8 years or over residing more than 3 miles from school, or under 8 years residing more than 2 miles from school	Primary/ Secondary School	Schooldays
Work	Employed persons in non-car owning households	Employment Centre	Week days
Shopping	Persons in non-car owning households	Shopping Centre	Once a week
Health	Persons in non-car owning households requiring medical attention	Doctors Surgery	Once a week

II SECONDARY NEEDS FOR PUBLIC TRANSPORT

Transport Need	Population Served	Access to	Frequency of Local Bus Service
School	School children aged 8 years or over living between 2 and 3 miles from school or under 8 living between 1 and 2 miles from school	Primary/ Secondary School	Schooldays
	Secondary School children	Secondary School (after school hours for games)	Once a week
Further Education	Persons aged 16-18 years who have left school	College of Further Education	Weekdays
Shopping	Housewives in households where the car is absent during the working day	Shopping Centre	Once a week
Social	Persons aged over 70 in non-car owning households	Day Centre	Once a week
	Persons in non-car owing households	Hospitals (during non visiting hours)	Once a week

6.4.3 It is suggested by the writer that Regional Council Transport Policies and Programmes should give priority to meeting primary needs for public transport, as identified above (including the statutory requirements of providing school transport) and that any residual resources should be used to meet as many of the secondary needs for public transport as possible.

6.4.4 It is evident, therefore, that the need for public transport can be considered in relation to the need for different groups of people to have access to different types of facility or activities. Public transport needs vary according to the age of the population concerned including those under school age, those in full time education, those in (or seeking) full-time employment, those at home, but of working age (mainly housewives) and those in retirement. Thus, in defining a minimum level of service by public transport it is necessary to rank needs into a hierarchy. The most important needs, listed above are those into which financial resources should be channelled in order to provide access by public transport to the facilities listed. Obviously the availability of private transport in the Borders endows the rural resident with a considerable degree of mobility and reduces dependence upon public transport. The levels of public transport required to meet the needs identified above will thus apply exclusively to non-car owning households or to households which have access to the family car for only part of the day.

6.4.5 Unconventional public transport can offer a supplementary public transport facility which can meet occasional, intermittent and dispersed transport needs, often more effectively then conventional bus services in the Borders Region. "Primary needs" which can be met by unconventional

modes include weekly trips to the local shopping centre or doctor's surgery for persons in non-car owning households. "Secondary needs" such as weekly trips to the day centre, and journeys for shopping or for hospital visiting can also be more conveniently and cheaply catered for by unconventional public transport (which often provides a more flexible door-to-door service.)

6.5 AN ASSESSMENT OF PUBLIC TRANSPORT NEED AND THE POTENTIAL FOR THE FURTHER DEVELOPMENT OF UNCONVENTIONAL PUBLIC TRANSPORT IN THE BORDERS REGION

6.5.1 In April 1994 a survey was undertaken of the need for public transport in the Borders Region. Questionnaires were sent to the 66 Community Councils of the Borders Region inviting comments on the adequacy of public transport and the potential for further development of unconventional services. A response was received from 46 Community Councils (ie 70%). The questionnaire circulated is shown as Appendix B.

6.5.2 The results of the survey are summarised in Table 6.1 by District and Community Council Area. In brief, the level of need for public transport was as follows (Table 6.2).

TABLE 6.2
BORDERS REGION - SURVEY OF PUBLIC TRANSPORT NEED 1994 (SUMMARY TABLE)

DISTRICT (and total number of Community Councils)	Adequate Local Bus Services	Inadequate Local Bus Services	Potential for development of Unconventional modes	Complete reliance on private transport
Berwickshire (21)	6	7	8	1
Ettrick & Lauderdale (16)	7	5	5	0
Roxburgh (19)	5	8	9	2
Tweeddale (10)	2	2	2	1
TOTAL BORDERS REGION (66)	20	22	24	4
As percentage of all 66 Community Councils in the Borders Region	30	33	36	6

Source: Community Councils

TABLE 6.1

BORDERS REGION SURVEY OF PUBLIC TRANSPORT NEED 1994

DISTRICT	COMMUNITY COUNCIL	PUBLIC TRANSPORT NEEDS			
		ADEQUATE LOCAL BUS SERVICES	INADEQUATE LOCAL BUS SERVICES	POTENTIAL FOR DEVELOPMENT OF UNCONVENTIONAL TRANSPORT	NONE COMPLETE RELIANCE ON PRIVATE TRANSPORT
Berwickshire	Ayton				
	Burnmouth				
	Chirnside	*		*	
	Cockburnspath		*		
	Coldingham		*	*	
	Coldstream		*	*	
	Cranshaws				*
	Duns				
	Eccles	*			
	Edrom	*			
	Eyemouth				
	Foulden				
	Gavinton		*	*	
	Grantshouse		*	*	
	Greenlaw		*	*	
	Hutton			*	
	Reston	*			
	St. Abbs	*		*	
	Swinton	*			
SUB TOTAL	(14 responses)	6	7	8	1
ETTRICK & LAUDERDALE	Herriot		*		
	Stow		*	*	
	Clovenfords	*			
	Galashields & Langlee		*	*	
	Ettrick & Yarrow	*			
	Lilliesleaf		*	*	
	Selkirk				
	Bowden	*			
	St. Boswells	*			
	Newtown St. Boswells	*			
	Maxton Earlston Melrose	*		*	
	Lauderdale		*		
	Oxton Tweedbank	*		*	
SUB TOTAL	(12 responses)	7	5	5	0
ROXBURGH	Ancrum				
	Burnfoot				
	Crailing		*	*	
	Denholm	*			
	Ednam		*	*	
	Floors				*
	Hawich		*	*	
	Heiton				*
	Hobkirk		*	*	

	Jedburgh	*			
	Jedvalley		*	*	
	Kalewater	*		*	
	Kelso				
	Lanton				
	Newcastleton	*		*	
	Oxnam		*	*	
	Southdean		*		
	Sprouston		*	*	
	Yetholm	*			
SUB TOTAL	(15 responses)	5	8	9	2
TWEEDDALE	Carlops		*	*	
	West Linton				
	Newlands				
	Skirling	*			
	Uppertweed		*	*	
	Peebles				
	Innerleithen	*			
	Manor				*
	Eddleston				
SUB TOTAL	(5 responses)	2	2	2	1
GRAND TOTAL	(46 responses)	20	22	24	4

Source: Survey of Community Councils

6.5.3 Table 6.2 thus reveals that some 30% of community councils in the Borders Region considered that they had an adequate service of conventional bus services for most of their public transport needs. Some 33% thought that their local bus service was inadequate whilst a total of 36% of councils believed that unconventional modes should be developed to supplement conventional services or meet the needs of areas otherwise devoid of any public transport, despite the fact that some already had them. In some cases, although the local bus service was considered adequate there was scope for the further development of innovatory services. Only four community councils (6% of all community councils) in the Borders Region regarded themselves as completely independent of public transport. These were Cranshaws, Floors, Heiton and Manor. It is noted that there was a latent demand for public transport even in a Region such as the Borders, which enjoys a high and growing level of car ownership. The distribution of the 24 community councils which recognised the potential for further development of innovatory modes to meet public transport need is shown in Figure 6.1. Figure 6.2 identifies the distribution of the 22 community councils which considered their public transport services inadequate for local needs. Figure 6.3 shows the 20 community councils identifying adequate local bus services whereas Figure 6.4 shows the distribution of the few community councils reporting a complete dependence on private transport.

6.6 RESULTS OF THE SURVEY

6.6.1 The community councils surveyed were invited to comment on what improvements should be made to services (conventional and unconventional) in order

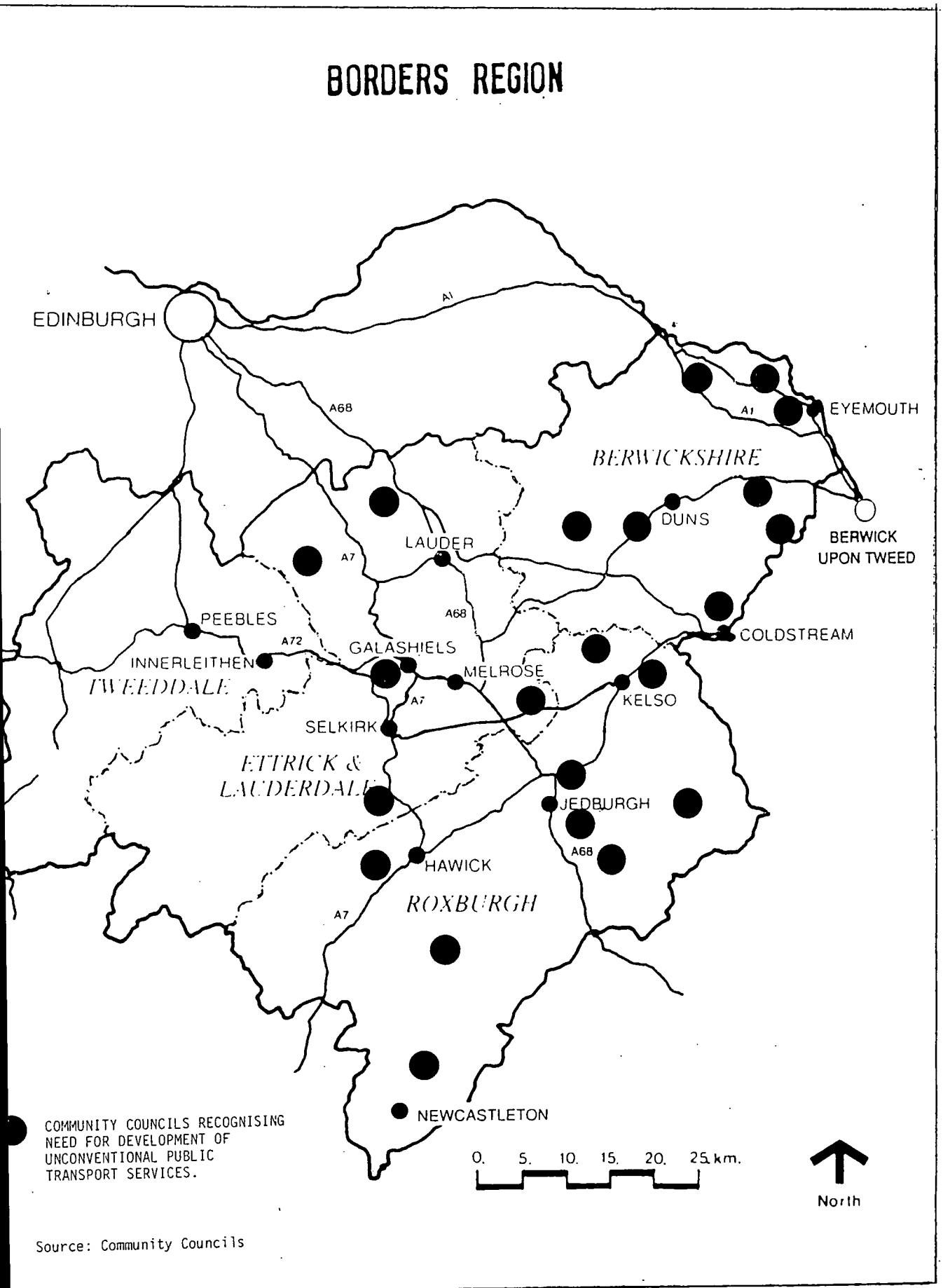

FIGURE 6.1 SURVEY OF PUBLIC TRANSPORT NEEDS 1994.

COMMUNITY COUNCILS RECOGNISING
NEED FOR DEVELOPMENT OF
UNCONVENTIONAL PUBLIC
TRANSPORT SERVICES.

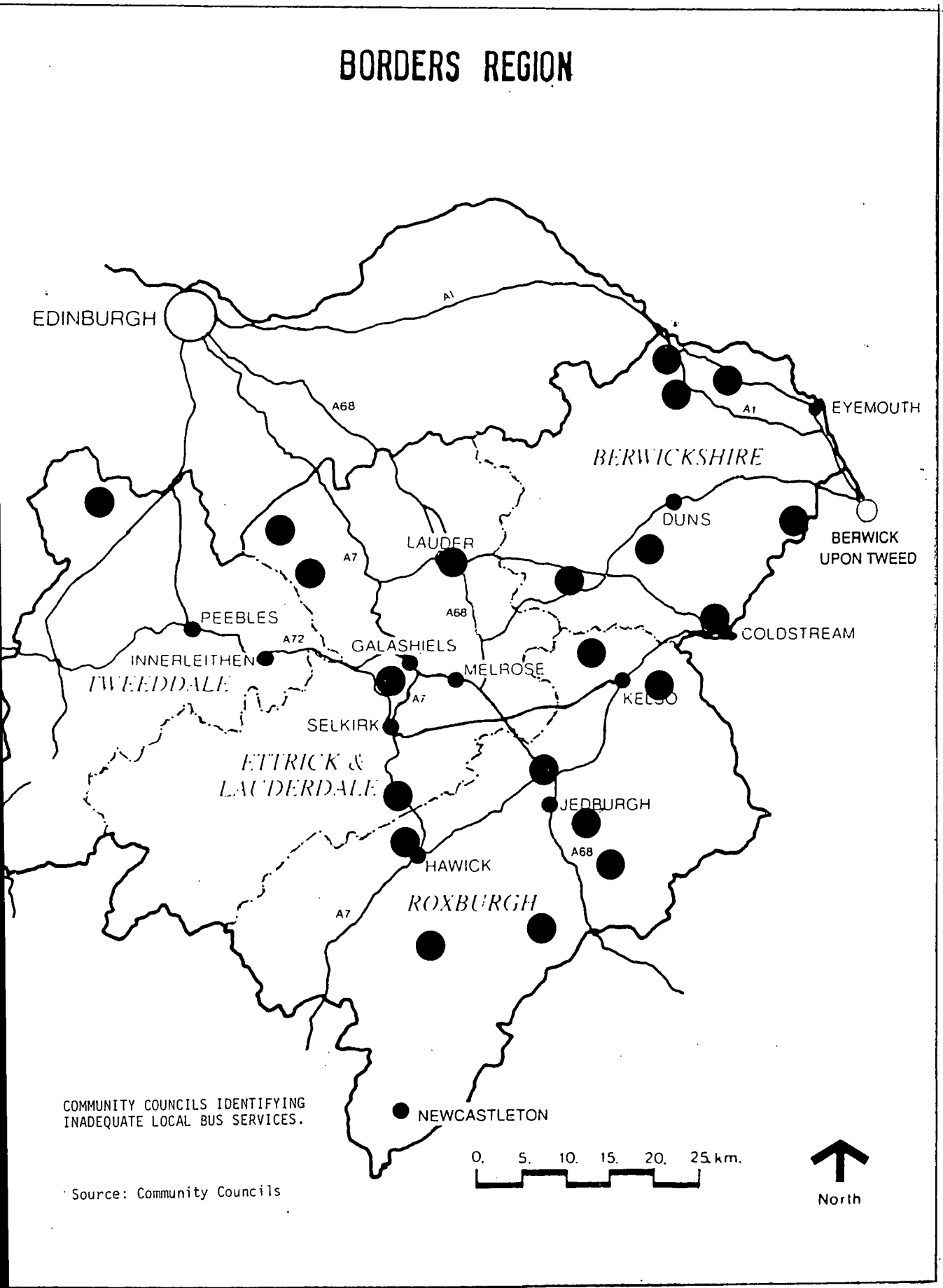

FIGURE 6.2 SURVEY OF PUBLIC TRANSPORT NEED 1994.

COMMUNITY COUNCILS IDENTIFYING
INADEQUATE LOCAL BUS SERVICES.

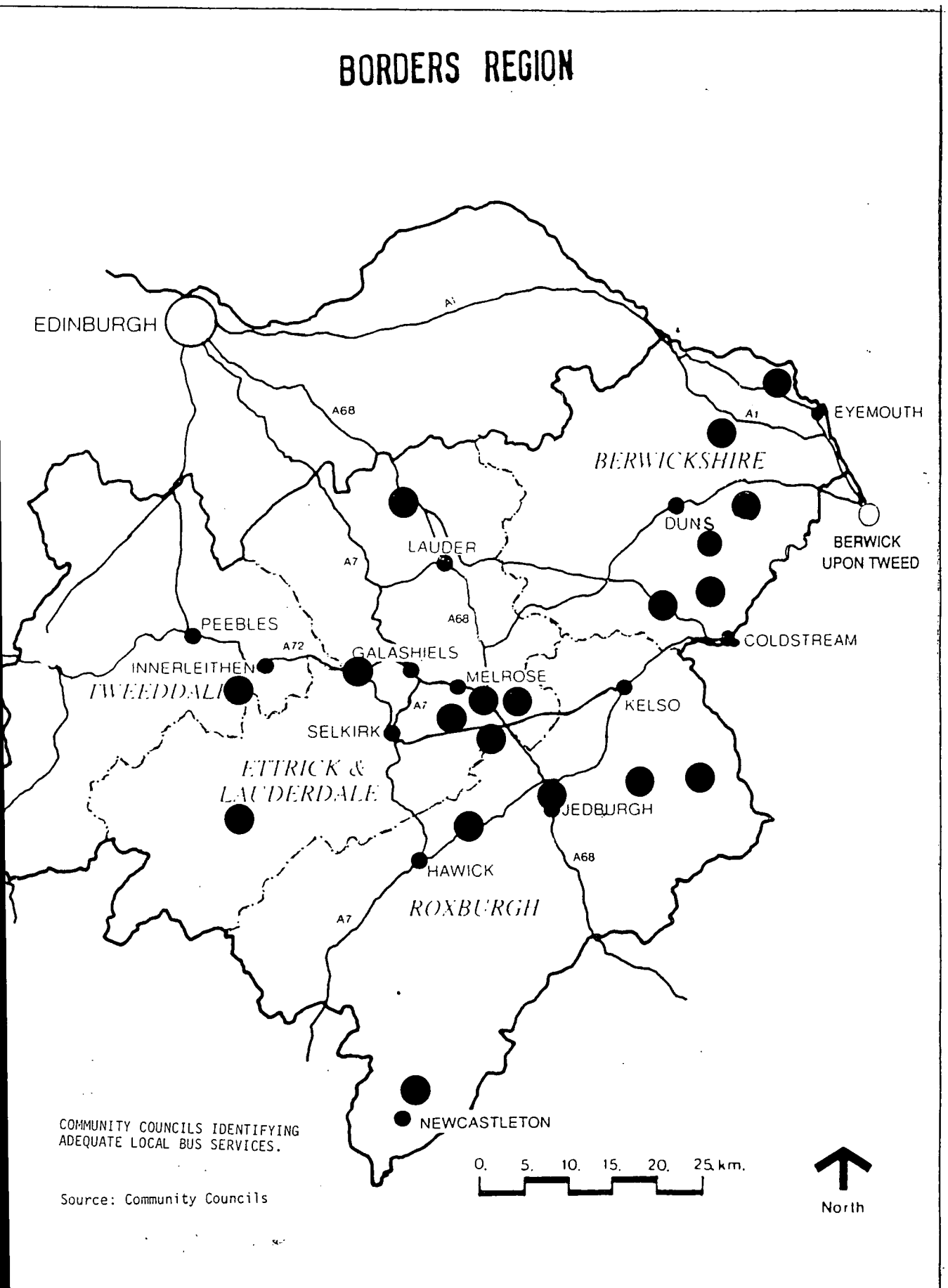

FIGURE 6.3 SURVEY OF PUBLIC TRANSPORT NEED 1994.

COMMUNITY COUNCILS IDENTIFYING
ADEQUATE LOCAL BUS SERVICES.

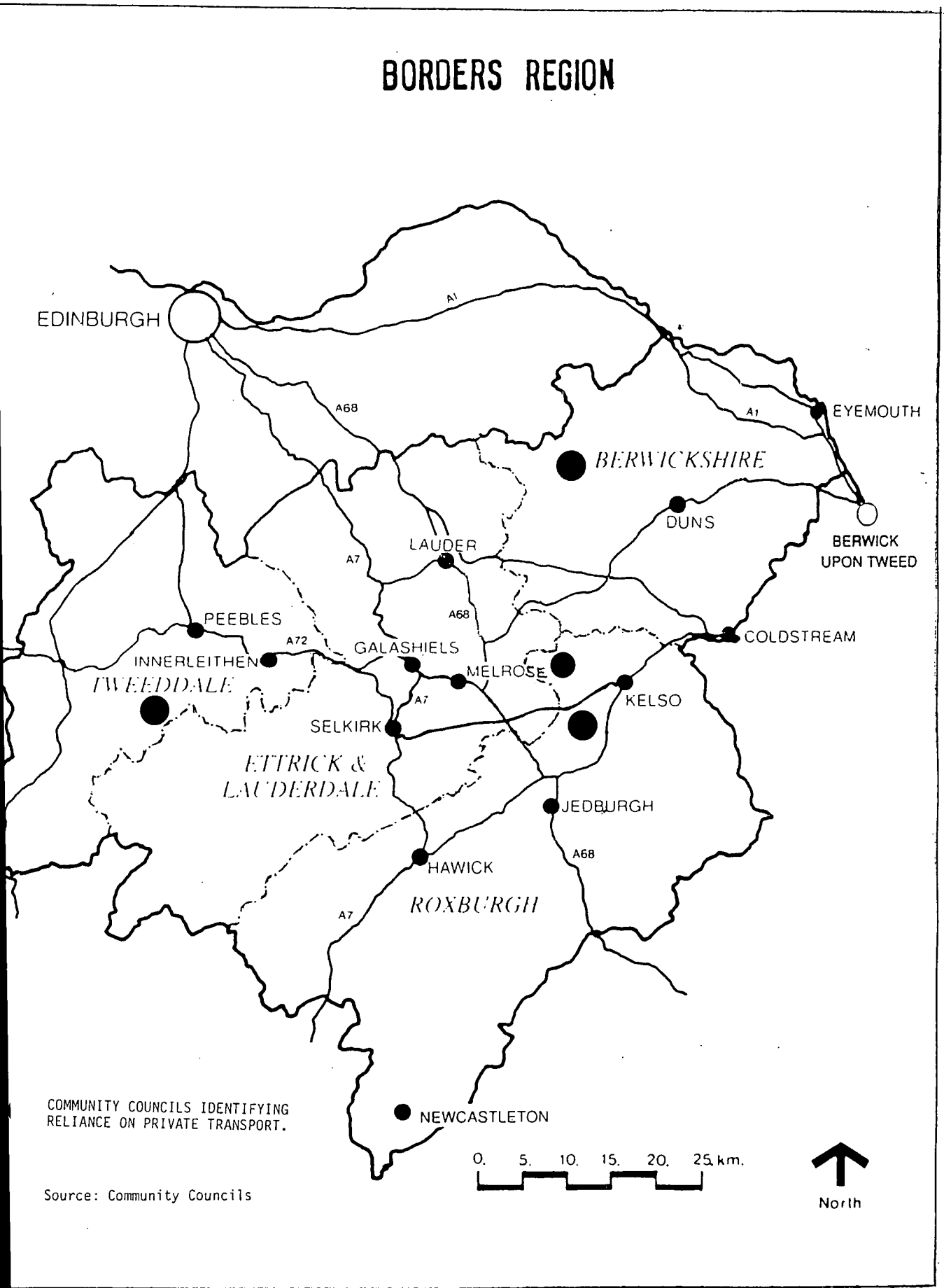

FIGURE 6.4 SURVEY OF PUBLIC TRANSPORT NEED 1994.

COMMUNITY COUNCILS IDENTIFYING
RELIANCE ON PRIVATE TRANSPORT.

to meet their need for public transport. The results may be summarised as follows:

1. The Problem of Access to Borders General Hospital. This Regional Hospital was established in a central location near Melrose in 1992 following the closure of Peel Hospital. The survey demonstrated that many rural residents have experienced great difficulty in reaching the hospital by public transport for treatment or hospital visiting (eg Coldingham CC). Apparently the timing of conventional bus services is not always suitable for surgery and visiting hours and there are few public bus services on a Sunday. Several community councils (eg Eccles, Lauderdale) have suggested the development of organised car sharing schemes or community bus services from their local village to and from the hospital. The advantage of the community bus is its flexibility in terms of routing, timing and day of operation in that the service can be adapted to arrive and depart at the hospital to accord with surgery visiting hours. A community bus service can also be arranged to operate on Sundays when there are few regular bus services.

2. Access to "Gateway" Railway Stations located outside of the Region at Carlisle, Berwick-on-Tweed and Edinburgh. Several community councils in Berwickshire (eg Hutton) commented on the difficulty of reaching the main line station at Berwick now that all local railway stations in the Region have been closed. The use of a community bus to connect dispersed villages and hamlets directly to Berwick station was suggested, timed to connect with main line trains.

3. The need to improve east-west communications across the Region. The community councils generally considered that north-south links by public transport to Edinburgh, in particular, were good, but that bus services running laterally from west to east across the grain of the road network were generally poor (eg Floors CC and Lauderdale CC).

4. Inadequacy of Public Transport generally. Some 22 community councils (ie 33% of all community councils in the Region) considered that existing levels of public transport were inadequate to meet the needs of the rural population. The pattern of distribution of these community councils identifying a need for improvement is shown in Figure 6.2. Inadequacy of services can take several forms.

(1) Unsuitable timing of bus services which do not allow sufficient time for shopping in the local market town (eg Swinton CC).

(2) The almost complete absence of evening or Sunday services (eg Jedburgh CC, Heriot CC and Skirling CC).

(3) Bus services unsuitable for the daily journey to work into the employment centres of Berwick, Kelso and Galashiels (eg Swinton CC and Stow CC).

(4) Problems of reaching clinics and doctors' surgeries such as Melrose Health Centre due to the unsuitable timing of services (eg Newtown St Boswells CC). Access to Dingleton Hospital in time to attend doctors' surgeries or for hospital visiting was also identified as a problem by this community council.

(5) Absence of even a weekly market day shopping service into the local market town in some community council areas (eg Crailing CC).

(6) The need for a more frequent service (eg Grantshouse CC).

(7) The difficulty for children of reaching leisure centres and leisure activities in Jedburgh (eg Jed Valley CC).

(8) The need for public transport as an emergency service, in the form of a dial-a-ride service when the family car is unavailable, was suggested by Southdean CC.

(9) The inflexibility of routing and timing of conventional bus services were identified as a problem by Newtown St Boswells CC. An unconventional service (eg community bus or dial-a-ride) could be timed to take children home after an evening visit to the cinema and routed to penetrate housihg estates and hence provide almost a door-to-door service for the elderly.

(10) The inconvenience of having no evening buses to take children home after a visit to the cinema in Galashiels was also mentioned by Newtown St Boswells CC. It is becoming impossible for people without cars to go out in the evening for leisure trips.

6.6.2 The dominance of the private car as a means of transport and the tightly knit nature of some rural communities, where informal car sharing arrangements and lift giving are common practice, was mentioned by

several community councils, eg Kalewater and Cranshaw CC. Lauderdale CC stated "the private car rules in this area". However, it should be noted that rising levels of car ownership in the Region are due not only to greater prosperity and higher income levels, but also result from the necessity of having one's own personal transport in the absence of any public transport services. Nevertheless the survey has revealed that there is still a captive market for public transport (conventional as well as unconventional) in the Borders Region. This captive market is numerically small, but includes sectors of the population such as the elderly (who may be unable to drive a car due to physical disability even though they can afford one), the unemployed, children and young people under 17 years who are not eligible to possess a driving licence and other members of a relatively small number of non-car owning households. One respondent (Galashiels and Langlee CC) stated that "bus services should be there for the public whether they are used or not" ie they should function as a "standby facility" or an emergency service.

6.6.3 Transport to school is generally not a problem since the Regional Council has a statutory duty under the terms of S55 of the 1944 Education Act to provide free school transport for all children residing more than a minimum distance from school. The Regional Council has also adopted a policy of making school vehicles available for use by fare-paying adult passengers where this does not interfere with specialised school transport needs. Thus several community councils rely on the use of school buses to satisfy their occasional and intermittent need for public transport (eg Greenlaw CC, Floors CC and Crailing CC.). A problem arises in the Borders Region, as in many other rural areas throughout the

United Kingdom, where the school child resides within the three mile limit and hence must make his own arrangements to reach school. Sometimes children must walk up to two miles along dark country roads in winter to or from school. The Scottish day light problem does not help this task.

6.7 VILLAGE SURVEYS OF PUBLIC TRANSPORT NEED

6.7.1 During the course of the above investigation detailed surveys were undertaken of selected community council areas to illustrate the nature of the rural transport problem and the role which is being played by unconventional modes of public passenger transport to overcome the physical isolation being suffered by some rural communities and the way their public transport needs are being met. The following section, therefore, demonstrates the type of need being encountered in the Borders Region with reference to selected community councils. Four community councils were selected for more detailed study, with the co-operation of the Secretaries concerned. These were:

1. Edrom, Allanton and Whitsome Community Council (Berwickshire District);

2. Sprouston Community Council (Roxburgh District);

3. Newtown St Boswells Community Council (Tweeddale District);

4. Skirling Community Council (Tweeddale District).

The location of these study areas is shown in Figure 6.5.

6.8 EDROM, ALLANTON AND WHITSOME (BERWICKSHIRE) (10)

1. INTRODUCTION

6.8.1 The villages of Allanton, Edrom and Whitsome have respectively 42, 8 and 31 households. In the wider community council area there are a further 132 households distributed in groups or as single dwellings. Edrom is located on the Duns to Chirnside bus route and is relatively well served with public transport. The main problems, therefore, lie with the villages of Allanton and Whitsome and the relatively large number of households residing in more isolated areas.

6.8.2 The primary schools in all three villages are now closed so that all schoolchildren must be transported to other schools. Allanton children must travel to Chirnside, Edrom children to Duns or Chirnside and Whitsome children to Swinton. All the secondary school children are bussed to Duns.

6.8.3 Employment is largely associated with farming, although some residents have jobs in light industries in Duns and Berwick-on-Tweed.

6.8.4 The main local shopping areas are in Berwick-on-Tweed and Duns (10 miles from Allanton and Whitsome) where dentist, hairdresser, etc, are also located. Allanton and Whitsome have part-time sub-post offices.

6.8.5 The local hospital is Borders General Hospital which is situated in Melrose some 30 miles away, although there are also health centres in Chirnside and Duns. The cinema and theatre are in Berwick-on-Tweed. Allanton is the only village to have a public house. The nearest playgroups are in Chirnside and Swinton while Whitsome has a mother-and-toddler group which meets one afternoon each week.

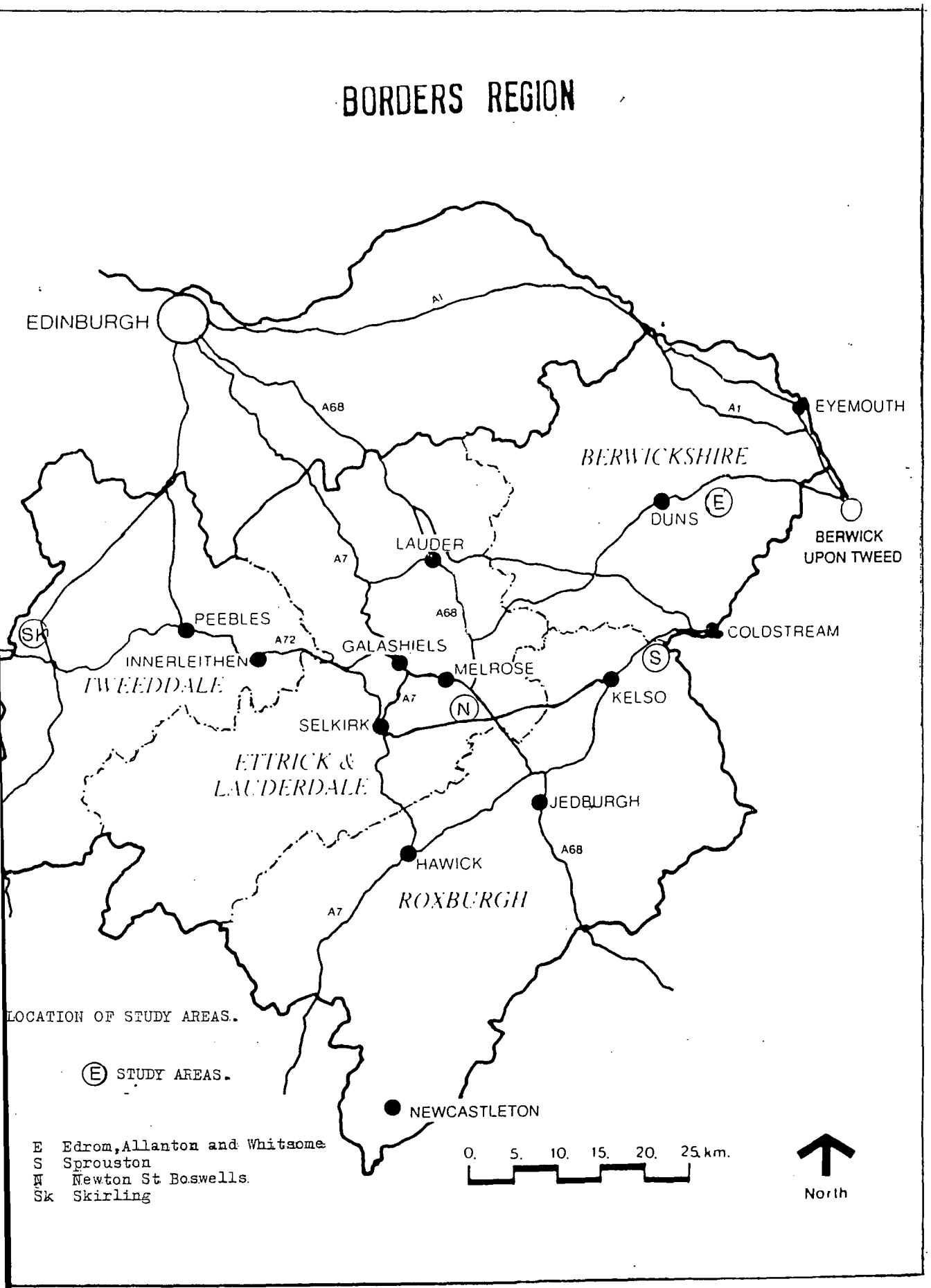

FIGURE 6.5 SURVEY OF PUBLIC TRANSPORT NEED 1994.

LOCATION OF STUDY AREAS.

2. A REVIEW OF PUBLIC TRANSPORT NEEDS

6.8.6 There are a large number of elderly people in the area who are, in general, becoming less fit to drive and who have an increasing need for health services. Most families possess a vehicle, but this is often used by the breadwinner to earn a living. In most homes this means that the husband takes the car to work leaving his wife and children stranded at home. Many households run a car only because it has become a necessity, not a luxury. The taking of children to a playgroup or a mother-and-toddler group requires a great deal of organising and requires the help and support of friends, neighbours and relations who may own private transport.

6.8.7 Secondary school age children who, in an urban environment, would be expected to become more independent of their family, find themselves relying almost exclusively on their parents to transport them to after-school events, cinema or theatre.

6.8.8 It becomes difficult to travel by public transport to a job in Duns or Berwick-on-Tweed. Whitsome has no public transport service to Duns and few buses to Berwick. The school runs are available to members of the public, but school buses are usually overcrowded with standing room only.

3. EXISTING BUS SERVICES

6.8.9 The Borders Courier bus service links the east coast to the Borders General Hospital, calling at all the health centres to pick up blood samples, etc. By telephoning a day in advance the Courier will stop for passengers, but it is a long and tedious journey and allows only about an hour at the hospital. This is adequate for a short visit, but is of little value if the passenger must attend a clinic. The WRVS operate a "voluntary social car service" for hospital visits, but few residents seem to be aware

of its existence. Volunteer drivers use their own vehicles to transport local residents to hospital or health centre and receive only their petrol costs. Passengers are expected to contribute to the costs.

6.8.10 The majority of health care and shopping trips are undertaken by friends and neighbours who give lifts. Taxis are available, but are very expensive with fares of about £1 per mile. The family car is thus the "workhorse" in rural areas for immediate family as well as friends and neighbours. Borders Regional Council must justify the subsidisation of both conventional and unconventional public transport which carries only a relatively small number of passengers. Nevertheless, the degree of hardship suffered by each of these passengers, following the withdrawal of a subsidy, may be great.

4. SUGGESTED IMPROVEMENTS

6.8.11 Improvements to bus services suggested by the community council include a review of timetables to make services more attuned to the needs of potential passengers. The council also considers that the cost of operating services might be reduced with the use of smaller buses. These are more manoeuvrable and could negotiate narrower roads and thus be able to reach isolated settlements whose residents must now walk considerable distances to the bus stop. Among the suggestions which have been proposed are an evening bus service to the Berwick Theatre or cinema and a shoppers bus into Berwick on Friday morning. The community council have also suggested the establishment of a dial-a-ride scheme which would be operated by smaller vehicles whose place of departure and destination are fixed, but passengers

would phone the day before and be picked up at their door. This might only operate a few days each week, but it could meet any latent need for public transport. In addition, the council consider that all available services (both conventional and unconventional) should be listed in a comprehensive Regional timetable.

6.9 HOUSEHOLD SURVEYS OF PUBLIC TRANSPORT NEED

6.9.1 Detailed studies were made (with the assistance of the Secretary of Edrom, Allanton and Whitsome Community Council) of the public transport needs of five typical families in the community council area. These were:-

1. retired couple in their mid-seventies who do not drive;
2. retired farmer who is a driver;
3. retired lady in Allanton;
4. agricultural worker from Allanton with two pre-School age children;
5. working farmer in his mid-seventies.

The results of this survey are outlined below (in relation to the questionnaire in Appendix B) in Table 6.3.

TABLE 6.3

BERWICKSHIRE DISTRICT
Edrom, Allanton and Whitsome Community Council

Family	Are public transport needs met	Suggested improvements	Scope for unconventional services	Journeys undertaken	Comments
1. Retired Couple	Yes		Yes	To Borders Hospitals to Berwick via Duns, Kelso & Coldstream	Bus service generally adequate
2. Retired Farmer (driver)	No	Allanton - Berwick via Duns (daily)	Yes	Any additional journeys	Public transport virtually non existent
3. Retired Lady (Allanton)	No	Allanton - Berwick via Duns			No commuter or evening service to Berwick
4. Agricultural worker with young children	No	Allanton - Berwick (two daily)	Yes	Allanton - Berwick	Cars are a necessity not a luxury hence bus services not fully used
5. Working farmer mid seventies	No	Weekly service from Allanton - Berwick supermarkets with 1.5 hours stay in Berwick	Yes	Community bus to Berwick or voluntary car scheme	V.C.S. organised by W.V.S. post bus services could be affected by privatisation of the post office

6.9.2 It is evident from this detailed survey of sample households in Berwickshire District that there are two basic public transport needs.

1. Access by bus or unconventional service to Berwick for shopping, work or evening entertainment.
2. Access to Borders General Hospital for hospital visiting or medical attention.

Four of the five sample households questioned considered that there was scope for the development of innovatory modes of public passenger transport to supplement an inadequate local bus service and meet the two basic transport needs of residents, described above. However, it was recognised that high levels of car ownership in the area tended to undermine the use of conventional bus services which cannot be operated without a subsidy. Local residents thus must face the dilemma of rising car ownership which leads to reduced patronage of bus services, causing their withdrawal, which in turn necessitates the acquisition of a private car.

6.10 **ROXBURGH DISTRICT (Sprouston Community Council)** (11)

1. INTRODUCTION

6.10.1 The Community Council area is served by one service bus which runs from Kelso to Sprouston arriving at 1.00pm and returning to Kelso for 3.00pm on weekdays only. A school bus, available for use by adult passengers leaves Kelso at 8am and operates around a circuit of farms and small hamlets before returning to Kelso. This school service only operates during school term.

2. A REVIEW OF PUBLIC TRANSPORT NEED

6.10.2 The parish has experienced the loss of its nursery class which was attached to the small two-teacher primary school. The community council is afraid that the 30 pupil school will be closed. The Regional Education Authority already transports the majority of pupils to this school from the extremities of the parish and the additional cost of bussing them another two miles into Kelso would not be great. If Sprouston school were to close, the Community Council believe that there would be a further decline in the rural population. There are a number of children who have been allocated places in the nursery in Kelso and the parents have managed to organise transport among themselves. There is also a playgroup which meets once a week in Sprouston village hall which young mothers reach by organising a shared lift-giving scheme.

6.10.3 Post buses are used by local residents although the service currently operates outside the limits of the parish. The Post Office uplift mail at 8.30am and 1.30pm on weekdays and once on a Saturday and Sunday.

6.10.4 The parish is served by a large single decker, but the problems of rural bus operation are illustrated by the fact that it carries only 6-10 regular passengers. It is suggested by the Community Council that it might be replaced by a post bus service whose seating capacity would be quite adequate for the needs of the parish. Another suggestion is that one of the Kelso to Berwick bus journeys could be re-routed to operate on the south side of the River Tweed through Sprouston, Carham and Wark, villages which were originally served by the Berwick - St Boswells rail service until 1965.

6.11 **ETTRICK AND LAUDERDALE DISTRICT (Newtown St Boswells Community Council)**

1. A REVIEW OF PUBLIC TRANSPORT NEED

6.11.1 A number of questionnaires were circulated by the Community Council to several youth groups, primary schools and to interested individuals who rely on public transport. The main results of the survey in terms of public transport need appears to be as follows.

1. Improved access to Borders General Hospital in the evenings and on Sundays for hospital visiting. This ends at 8pm yet the present return bus departs for Newtown St Boswells at 8.21pm. A later departure would enable visitors to spend more time with their sick relatives.
2. A more frequent bus service is needed to Dingleton Hospital and the Melrose Health Centre especially for patients who require chiropody treatment and are unable to reach these clinics by private transport, as out-patients.
3. Improved services between Newtown St Boswells and Kelso were requested (including a basic two hourly service).
4. A community bus service from Newtown to Jedburgh was suggested.
5. Requests were also made for late night return buses (after 10pm) from Galashiels to Newtown on Saturday and Sunday evenings.
6. The school children who returned questionnaires suggested greater use of small buses to provide a more frequent evening service to enable them to attend the cinema in Galashiels. Smaller buses would operate around the streets of housing estates and hence provide a more flexible door-to-door service for elderly passengers.

6.11.2 Thus, in conclusion, the survey of Newtown St Boswells parish has revealed the need for better access to Borders General and Dingleton Hospitals

for visitors and out patients and more late night return buses for adults and schoolchildren attending evening entertainment. The use of smaller buses operating around housing estates to provide a more convenient service for the elderly who would have a shorter distance to walk to a bus stop was also requested.

6.12 **TWEEDDALE DISTRICT (Skirling Community Council)**

6.12.1 Skirling Community Council members were questioned on the issue of public transport need in Tweeddale District. The general opinion expressed was as follows. It is accepted that public transport meets basic needs for commuting and shopping in the lightly populated area between Biggar and Peebles where few inhabitants do not possess or have access to private transport. Non-car owners, however, expressed a need for public transport after 6.30pm to enable them to travel to or from Biggar, Peebles and Edinburgh.

6.12.2 The need for public transport is strictly limited in this area of high car ownership. An increase in population density might help to support an improved local bus service, but it is unlikely that such a service would be viable and could operate without a subsidy from the Regional council. Nevertheless, there could be scope for the development of innovatory public transport to meet infrequent demand in an area of high car ownership, as an alternative to the conventional bus.

6.12.3 The survey of part of Tweeddale District has revealed the dilemma facing bus operators who seek to run services in areas which already rely on private transport. Should the conventional bus service continue to run as an emergency service when the family car is not available or should low-cost experimental schemes such as post bus services,

community bus services or voluntary social car schemes be encouraged.

6.13 **PRELIMINARY CONCLUSIONS FOR THE BORDERS REGION**

6.13.1 The above assessment of public transport need in the Borders Region has shown that even in a predominantly rural Scottish Region, with a generally high and rising level of car ownership, there is still a continuing, latent demand for public transport. The role of unconventional public transport in the context of the erosion of absence of regular conventional bus services can be significant. Previous chapters have pointed out the aging of the population of the Borders Region between the 1981-91 censuses resulting in a greater proportion of elderly residing in rural areas. The growing number of pensioner households without a car (50.5% in 1991) in the Borders Region has already been identified in Chapter 4. In this context, innovatory public transport can provide a more flexible door-to-door service geared to meet the need to carry a relatively small number of dispersed passengers. It enjoys flexibility in both route and timetable, unlike the regular conventional bus. The lack of flexibility of conventional bus services which are unable to meet the specialised needs of passengers wishing to visit doctors' surgeries or hospitals to reach places of leisure or entertainment in the evening or on Sundays was identifies by many community councils. The potential for the development of flexible dial-a-ride services was mentioned or community bus services whose route and timing can be adjusted to satisfy the need for access to medical centres with irregular visiting hours or surgery hours. The community bus can also provide a specialist service for visits by children and others to recreational

centres and for late evening or Sunday journeys when it would be unprofitable to operate a regular bus service.

6.13.2 The survey has also shown that many car owning households still rely on public transport for occasional journeys when the family car is unavailable. The role of unconventional public transport as a method of meeting public transport need was recognised by not less than 36% of all community councils in the Borders Region. This figure gives some measure of the ongoing demand for innovatory services in a predominantly rural Scottish Region.

II. THE HIGHLAND REGION

6.14 SURVEY OF COMMUNITY TRANSPORT INITIATIVES

6.14.1 In November 1993 a survey was undertaken by Highland Regional Council of the potential for the development of additional community transport services in each of the 134 community councils of the Highland Region (12). At that time rural public transport needs were being met by the use of an extensive network of post bus services, supplemented, where possible, by the use of school vehicles by fare-paying passengers. The network of conventional bus services in the Region was fairly comprehensive in the urban areas of Inverness, Fort William, Nairn, Dingwall, Wick and Thurso, but services were often either infrequent or non-existent in the remoter rural areas. The results of this survey of public transport need may be summarised below (Table 6.4).

TABLE 6.4

SURVEY OF PUBLIC TRANSPORT NEED
HIGHLAND REGION 1993-RESPONSE RATE

District	Community Councils contacted	Community Councils responding	% Response
Caithness	9	2	22
Sutherland	16	10	63
Ross & Cromarty	34	19	56
Inverness	24	13	54
Nairn	1	1	100
Badenoch & Strathspay	10	6	60
Lochaber	19	8	42
Skye & Lochalsh	21	12	57
TOTAL	134	71	53

Source: Highland Regional Council

TABLE 6.5

SURVEY OF PUBLIC TRANSPORT NEED 1993
HIGHLAND REGIONAL COUNCIL
(IDENTIFICATION OF POTENTIAL FOR DEVELOPMENT OF COMMUNITY TRANSPORT)
(by Community Council areas)

District	Total C.Cs. Contacted	Community Councils Identifying: No Problem	Possible Experimental Services	Potential Use of School or Social Transport
Caithness	9	-	1	1
Sutherland	16	5	2	4
Ross & Cromarty	34	8	5	7
Inverness	24	7	3	3
Nairn	1	-	1	-
Badenoch & Strathspay	10	3	-	3
Lochaber	19	3	1	4
Skye & Lochalsh	21	3	3	6
TOTAL HIGHLAND REGION	134	29	16	28

Source: Highland Regional Council

6.14.2 The above Table 6.4 shows that the survey achieved a response rate of 53%. this rate varied between districts depending upon the urgency and awareness of the rural transport problem. The community councils contacted were invited to comment on the following matters:-

1. A description of existing transport problems.
2. Suggested potential solutions to these problems in terms of the development of community transport including the use of education or social service vehicles operated by the Regional council.
3. No problems identified, where applicable.

6.14.3 The results of this survey are tabulated in detail by district and community council area in Appendix C. They have been summarised by district in Table 6.5.

6.14.4 Table 6.5 shows that 29 of the community councils which responded recognised that there was no identifiable public transport problem in their area which would justify the further development of community transport as a solution. In other words, public transport needs were already being met by the use of conventional bus and rail services, where these were available, or by existing post bus or school transport. Sixteen community councils felt that there was potential for the introduction of additional experimental services in the form of community transport initiatives whereas 28 community councils believed that their public transport needs could be met by the further use of school or social service vehicles (owned and operated by the Regional Council) for the carriage of fare paying passengers. The geographical distribution of these varieties of public transport needs throughout the Highland Region are shown in Figures 6.6, 6.7 and 6.8.

6.14.5 There would thus seem to be some demand for the further expansion of community transport initiatives in the Highland Region although this demand tends to be limited by prevailing high levels of car ownership in the rural parts of the Region and the prevailing widespread reliance on private transport as a means of overcoming remoteness and inaccessibility.

6.15 THE NATURE OF PUBLIC TRANSPORT NEED IN REMOTER PARTS OF THE HIGHLAND Region

6.15.1 The 71 completed questionnaires received from the community councils give some impression of the type of public transport need encountered in the Highland Region. Solutions to these problems in terms of the type of innovative transport which could be introduced to meet this need were also suggested. The rural transport problems identified by the 71

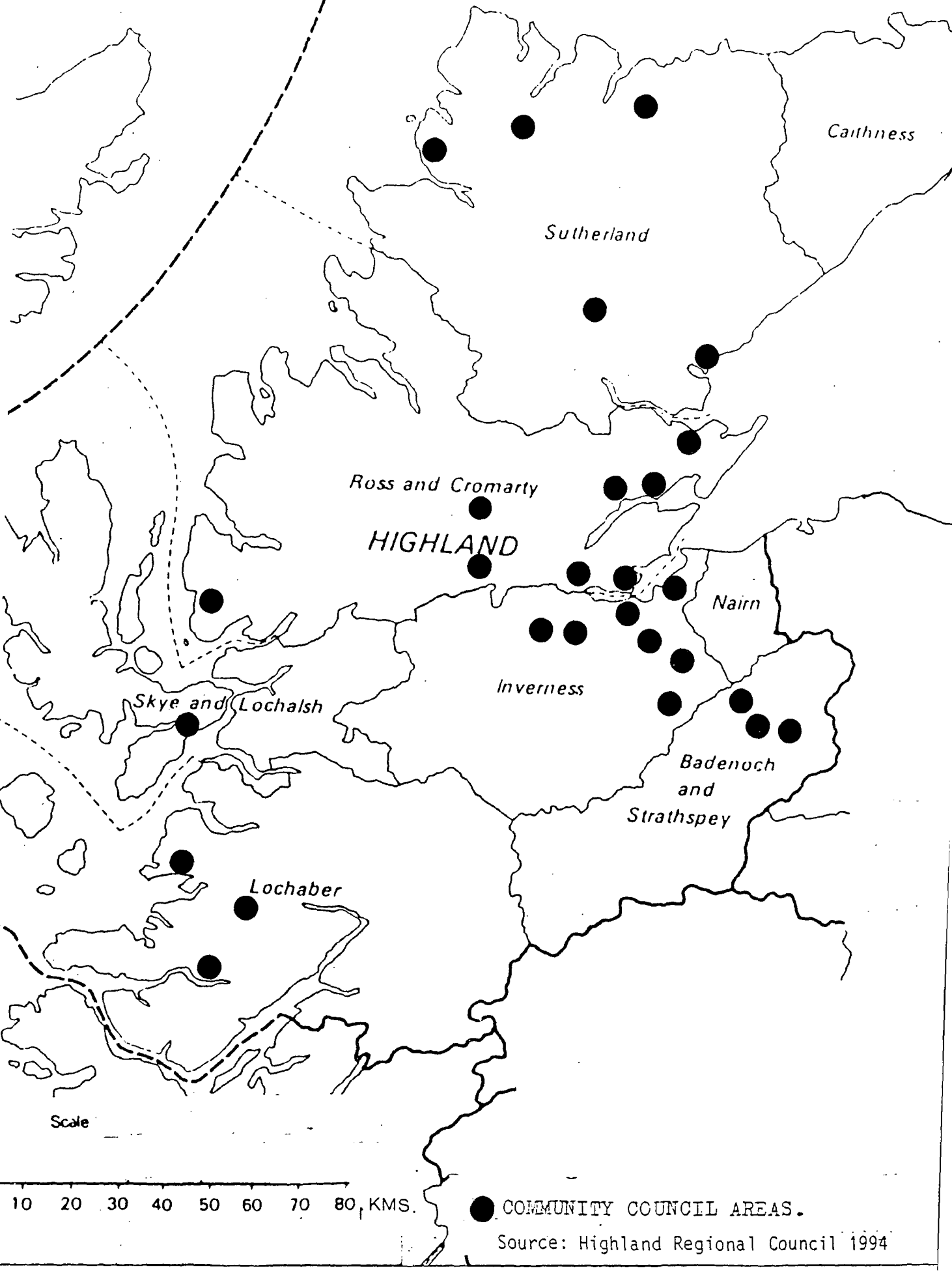

FIGURE 6.6 AREAS REPORTING NO PROBLEM.

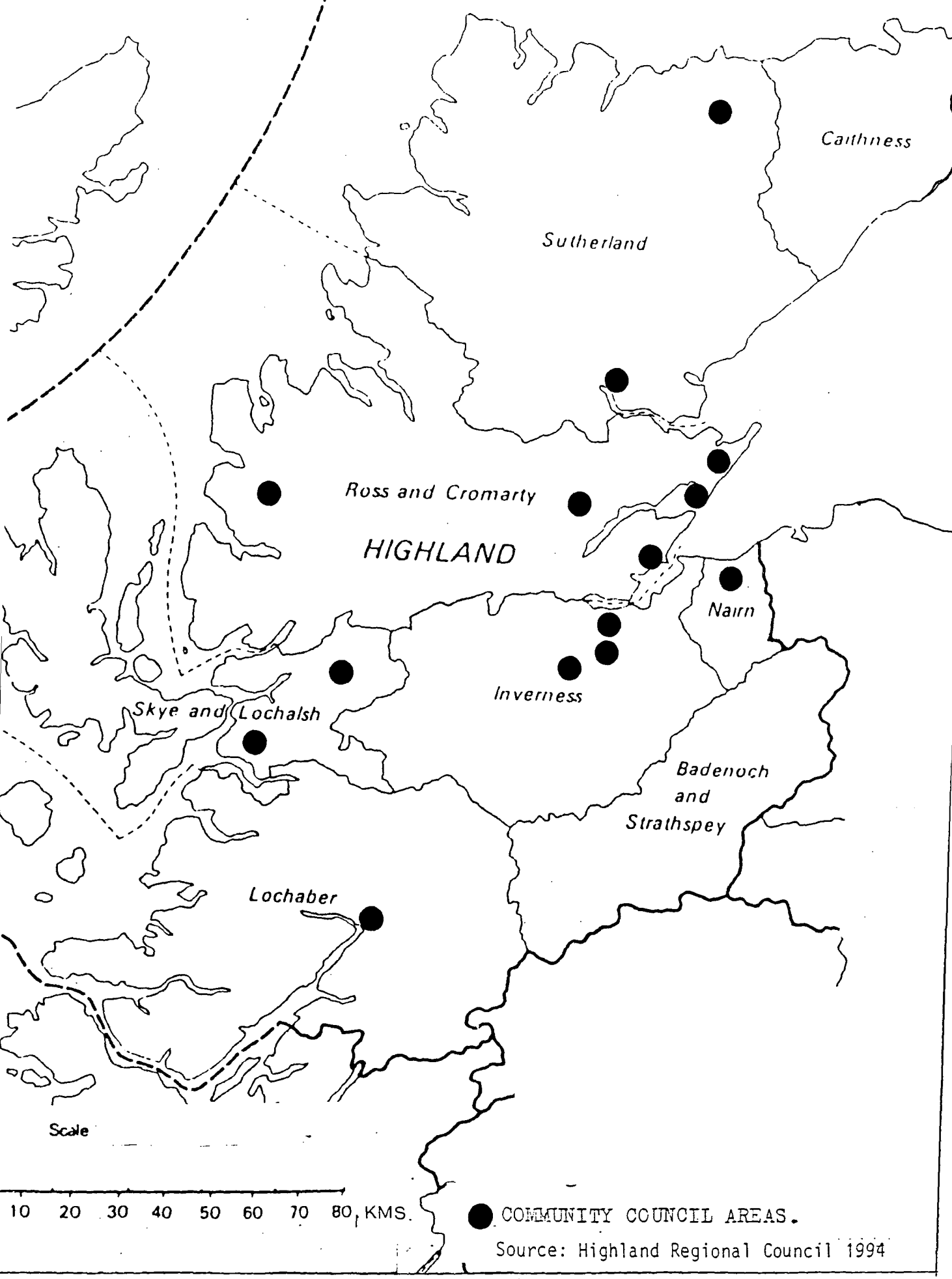

FIGURE 6.7.LOCATION OF POSSIBLE EXPERIMENTAL SCHEMES.

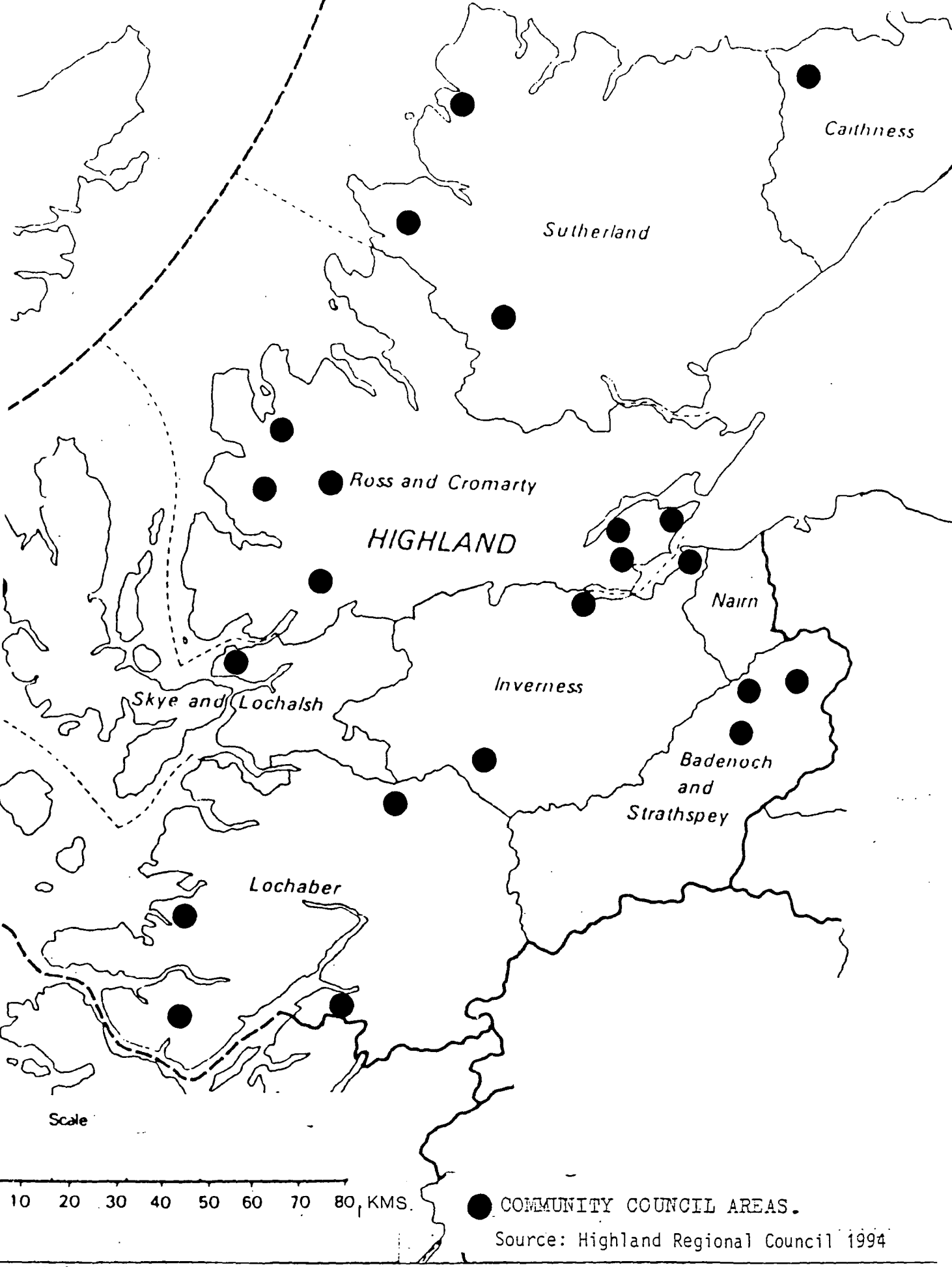

FIGURE 6.8.AREAS RECOMMENDING USE OF EDUCATION AND SOCIAL SERVICE VEHICLES.

responding community councils obviously vary greatly, but may be briefly summarised as follows. It was evident that there were a number of key transport issues which needed to be addressed if rural deprivation, caused by inaccessibility and remoteness, was to be overcome. These issues are summarised below.

1. The problem of access to doctors' surgeries, hospitals and clinics for medical treatment and hospital visiting.

This key issue was identified by 17 community councils. The problem was most acute on Sundays when conventional bus services are unlikely to be available. It affects both patients and their friends and relatives who may wish to visit them in hospital. Conventional bus services tend to be too inflexible to fit surgery hours. Similar difficulties arise for patients attending dentists, opticians and chiropodists. A community bus service timed to allow for hospital visiting, eg to Raigmore Hospital at Inverness, or to attend doctor's surgery was suggested as a solution to this problem by several community councils (eg Creich CC, Gairloch CC and Fort Augustus CC).

2. Lack of public transport in the evenings or on Sundays.

Bus and rail services tend to be infrequent or non-existent in the evenings or on Sundays, according to 16 community councils. Fifteen community councils suggested the need for a locally based minibus which could be used to make social trips by the elderly or educational visits by the young. The community bus provides a more flexible service whose journey time can be adjusted to opening and closing times at the destination (eg Lochcarron CC and Watten CC).

3. Problem of access to Post Offices.

The difficulties facing the elderly who are either non-car owning or are unable to drive due to physical disabilities in areas without conventional public transport were noted by five community councils. One of the most critical problems facing this sector of the rural community is access to a post office to collect pension or DSS payments. This specific problem was noted by three community councils who stressed the difficulties facing an aging rural population who were unable to collect their pensions due to the closure of local post offices and the subsequent need to travel considerable distances to villages where a post office was still open (eg Lochalsh CC, Plockton CC).

4. Difficulties of making shopping trips to the local urban centre.

This was mentioned as a key issue by 19 community councils who found existing conventional bus services inappropriately timed for shopping journeys or completely absent. A community bus service making a weekly shopping trip into the local market town has been suggested as a solution (eg Lochcarron CC, Nigg CC).

5. The problem of undertaking social trips in the evenings.

Nine community councils recognised the need for community transport to enable the elderly, without a car, to make social outings in the evenings when there was generally no conventional bus service available. Social trips include visits to the theatre, cinema or community centre (eg Lochalsh CC).

6. Difficulties for young people to reach educational activities.

Thirteen community councils identified the need for their youth to visit sports activities, swimming baths, cubs, scouts and guides, football matches and sports centres (eg Ardersier CC, Fort Augustus CC).

7. Need for car sharing arrangements.
Although many of the rural population rely on lifts in the cars of friends and relatives to make essential journeys, three community councils reported that their elderly were unable to drive and four suggested the establishment of voluntary social car schemes administered by the Regional Council. This would meet the needs of residents without access to a car or unable to drive due to physical infirmity who were unable to obtain lifts (eg Kincraig CC).

8. Improved connections at railway stations.
Three community councils reported that connections with trains at railway stations by both conventional and post bus services were inadequate and stressed the need for closer co-ordination between bus and rail (eg Grantown-on-Spey CC).

9. Inadequate bus connections with ferries.
This problem was highlighted by two community councils (Struan CC - Skye and Lochalsh and Western Ardnamurchan - Lochaber). A fully co-ordinated bus, rail and ferry service was suggested. Current timings were inconvenient.

10. Shortage of volunteer drivers.
A shortage of volunteer drivers who were willing and able to drive community buses or operate voluntary social car schemes was identified by two community councils (Dunvegan and Wester Loch Ewe). This is an ongoing problem throughout the Highland Region where

the introduction of innovatory public transport is critically dependent upon the co-operation of dedicated volunteers to drive the vehicles and organise the community bus service.

6.16 A CASE STUDY OF THE TONGUE AREA OF SUTHERLAND DISTRICT COUNCIL

6.16.1 A detailed survey of public transport problems and their possible solutions, with special reference to the role of unconventional services, was undertaken by Tongue Community Council in October 1993. The following account, supplemented by the details as described in Appendix D, discusses the nature of the rural transport problem in this remote and inaccessible area on the extreme northern coast of mainland Scotland. It may be taken as a case study of how remote and inaccessible rural communities in the Highland Region are endeavouring to overcome their physical isolation through reliance on private transport and car sharing schemes as well as experimentation with community bus services. Such areas are generally devoid of conventional bus and rail services and must rely mainly on the private car supplemented, where possible, by innovative public transport. The emphasis in these areas is on "self help" and car sharing arrangements. The latter are generally informal and rely on the good will of relatives or neighbours. In this sort of transport environment there would seem to be scope for the further development of unconventional services which are attractive because of their flexibility and convenience in that they can provide almost a door-to-door service, unlike the inflexibility of a conventional bus which can only operate according to a fixed timetable and on specific days of the week. The account contained in Appendix D, therefore, describes how the remote community of

Tongue is endeavouring to overcome its geographical isolation. The writer would like to express his thanks to the Secretary of Tongue Community Council for this response. Figure 6.9 shows the location of Tongue on the northern tip of the Scottish mainland.

6.17 **GENERAL CONCLUSIONS**

6.17.1 The above survey, conducted by Highland Regional Council, has revealed the nature of public transport need in the Region. Perhaps the most important conclusion is that the majority of community councils, as represented by a non-response rate to the survey of 47% (or 63 councils), rely primarily on personal, private transport. This may take the form of their own cars or the use of vehicles provided by relatives, friends or neighbours. In addition, 29 community councils (22% of the total for the Region) reported no evidence of any significant public transport problem. Some 44 community councils (33% of the total) did, however, identify a potential demand for the development of additional experimental services or the use of school or social service vehicles (owned and operated by the Regional Council) by fare-paying passengers.

6.17.2 Where a demand for the further development of innovative transport was recognised, experimental schemes were suggested which would meet similar categories of need to those identified in the Borders Region. Community transport initiatives, supported by the Regional Council, were requested (as in the Border) to meet the requirement of better access to local urban centres for medical attention, hospital visiting or to reach doctors' surgeries with restricted visiting hours. This need came high on the list of demands in both Regions. Other requests for community transport in the two Regions

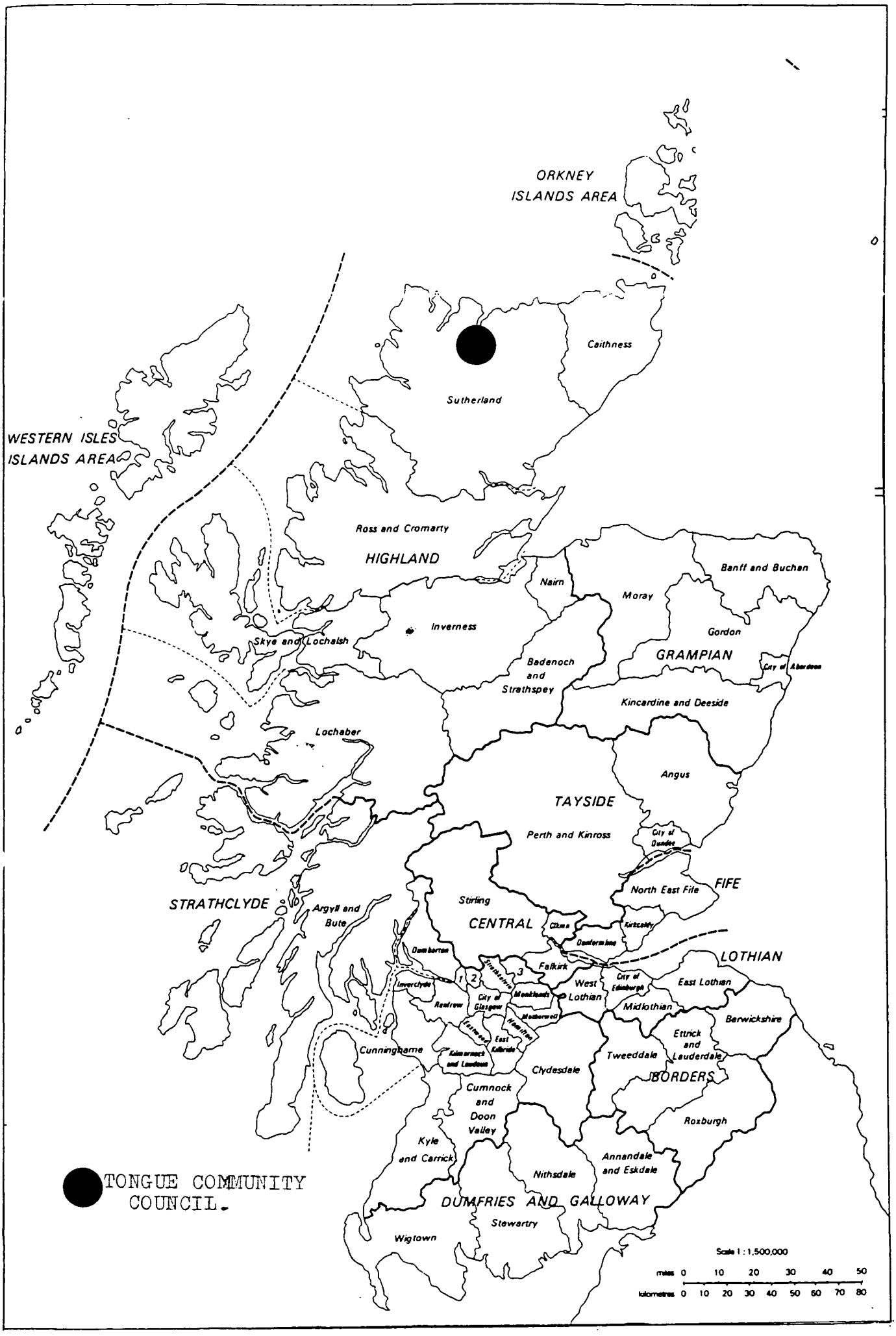

FIGURE 6.9 LOCATION OF TONGUE COMMUNITY COUNCIL.

were to enable the elderly to visit more distant post offices to collect the pension, DSS payments or transact other essential business. Transport to attend social facilities in the evening (among the elderly) or afternoon for weekend sports and recreation activities (among the youth) was another clearly identifiable need. Inadequate evening or Sunday bus services could be offset or supplemented by experimental schemes, where appropriate.

6.17.3 Thus many of the elements of deprivation caused by remoteness and inaccessibility which were noted in the Borders Region were also evident in the Highland Region. These problems have been rendered more critical by the demographic trend of an aging rural population. However, it cannot be overemphasised, as described in previous chapters, that 69% of households in the Borders Region and 69% of households in the Highland Region also enjoyed access to a private car in 1991. Private transport thus remains the predominant mode of transport for the vast majority of journeys undertaken by the rural population of the two Regions and continues to meet most of their transport needs.

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CHAPTER SEVEN

THE ROLE OF UNCONVENTIONAL PUBLIC TRANSPORT IN THE HIGHLAND AND BORDERS REGION AS A MEANS OF RESOLVING THE INACCESSIBILITY OF RURAL COMMUNITIES

7.1 INTRODUCTION

7.1.1 It will be convenient to deal with each of the two case studies in turn.

7.2 HIGHLAND REGION

7.2.1 As stated in Chapter 3, unconventional modes of public transport in the Highland Region are dominated by postbus services. No other experimental forms of public transport have been developed in the Region. The reason for this is that the Regional Council considers that a combination of postbus services and school bus services, available for use by fare-paying passengers, provides the best solution to inaccessibility in the Region.

7.2.2 There are currently (November 1993) 45 postbus services operating in the Highland Region of which seven are subsidised by the Regional Council. The distribution of these postbus services is shown in Figure 7.1. This map shows the dispersed pattern of postbus operation in the region with many service acting as extensions of the bus and rail network while others perform a very localised transport role, linking sub-post offices with their rural hinterland.

7.2.3 Highland Regional Council are committed to a policy of replacing peripheral conventional bus services by postbus services which can be run at a lower cost per vehicle mile and which can provide a basic minimum level of service for remote and dispersed communities. the Regional Council also supports the integration of different modes of public passenger transport (eg postbus/conventional bus, postbus/rail) where this will result in an improved service and improved accessibility of rural settlements (1).

7.2.4 Highland Regional Council is committed to pursue a

policy of encouraging the extension of public passenger transport into those areas where no service exists and where there is a proven demand and will seek to introduce the form of service most appropriate to the level and nature of that demand (2). The postbus can provide a very flexible mode of public passenger transport in these remoter rural areas. It provides a year round, door-to-door service using a multi-functional vehicle which can carry both passengers and freight. It can provide also a valuable standby public transport facility in areas which already enjoy a highlevel of car ownership, but where the family car may not be available during the week as it is being used by the head of the household for the daily journey to work.

7.2.5 The number of postbus services in the Highland Region has increased steadily from 19 at Regionalisation in 1974 to 45 in 1993. These services have proved very popular and successful where the number of users is so small that no "orthodox" bus service could have survived except by unreasonably heavy subsidy. In only a few cases is any subsidy required by postbus services from Regional funds and then only because mileage is being operated which is not required for post purposes, or a larger vehicle than the usual postbus is needed (because of peak summer requirements) (3).

7.2.6 Postbus services in the Highland Region thus provide a very useful <u>supplementary</u> public trasnport facility, penetrating into remoter rural areas where the operation of conventional bus services would be grossly unprofitable. They provide a public transport service in the interstices between the network of conventional bus services. They also act as an extension of the public transport network from "gateway railway stations" or conventional bus termini. In these sparsely populated areas the number of potential users is so small that no orthodox bus service would survive with-

out unreasonably heavy contract payments. The success of postbus operation is reflected by the fact that there are currently 45 services of which two operate under contract with the Council and a further five require subsidy by the Council, to a total value of £17,136 in 1993/94.

7.2.7 In summary, the Regional Council's policy with regard to the operation of unconventional public trasnport may be summarised as follows (4):

1. To award contracts for the provision of public transport services in appropriate cases where no operator is willing to provide the desirable level of service on a commercial basis.
2. Review existing contracts to ensure that these cater for changes in need, cancelling contracts no longer required and awarding new contacts where appropriate.
3. Co-operate with the post office in optimising the use of postbuses throughout the Region.

7.2.8 The overall policy of the Council is to endeavour to sustain public transport throughout the Region at a level sufficient to meet the basic needs of the population (5).

7.3 THE USE OF POSTBUS SERVICES

7.3.1 In 1993/94 postbus services in the Highland Region carried a total of 15,412 passengers, including 1,084 schoolchildren. Trends in patronage have varied since the 1985 Transport Act de-regulated bus services, as shown in the following table (Table 7.1).

TABLE 7.1

Postbus SERVICES IN THE HIGHLAND REGION

TRENDS IN PATRONAGE 1985 - 1994

Year	Passengers	Trend (1984/85 = 100)
1984/85	23,475	100
1986/87	17,915	76
1988/89	15,940	68
1990/91	15,062	64
1992/93	15,013	63
1993/94	15,412	66

Source: Royal Mail

7.3.2 Table 7.1 shows that since bus service de-regulation, following the implementation of the Transport Act 1985, patronage of postbus services over the Highland Region as a whole has declined by 34% despite the fact that the number of routes has increased from 36 in 1984/85 to 45 in 1993/94. This decline in patronage may be due to a number of factors, the most significant being rising levels of car ownership. During the period 1981-1991, the percentage of households with no car in the Highland Region declined from 36% to 31% (6). Thus, although the number of postbus routes has risen, the number of passengers carried has declined since the 1985 Transport Act.

7.3.3 Postbus services are frequently organised in the Highland Region in conjunction with school transport services in order to provide a basic minimum level of service, for most settlements of over 50 population, of two return journeys per weekday into the local market town or rural service centre. In 1993/94 ten postbus services were used for the carriage of schoolchildren. The total number of scholars trans-

ported on postbuses during the year was 1,084. These were scholars holding school contract tickets.

7.3.4 Postbus services thus carry a significant total of passengers in the Highland Region and function as a supplementary public transport facility to conventional bus and rail services. However, the role of postbus services compared to conventional bus services must not be exaggerated. In 1984, the latest year for which comparable information is available, Scottish Bus Group stage carriage services in the Highland Region carried 4,163,231 passengers conpared with 23,475 by postbus (7). Thus in 1984/85 postbuses moved only 6% of bus passengers in the Highland Region. The role of unconventional public transport should, therefore, not be exaggerated. It functions as a supplementary or emergency service. The vast majority of passengers continue to be carried by conventional bus services or rail services.

7.3.5 Interest in postbus services by geographers and transport planners has increased since the first postbus route in Britain was opened on 4 June 1968 between Dunbar and Inverwick in East Lothian. Among the comprehensive studies of the role and potential for the development of these services are those by Turnock (8), Watts (9) (10), Carpenter (11) and Stark (12), who have investigated this mode of paratransit in detail.

7.3.6 Table 7.2 lists all postbus services operating in the Highland Region by order of patronage. It is evident from this table that some 76% of passengers are carried by only 16% of services in the Region. It is also apparent that 58% of routes carry less than 100 passengers annually. Thus use of postbus services in the Highland Region tends to be concentrated on only seven routes which each accounted for more than 500 passengers annually. There were, in fact, as many as

TABLE 7.2

HIGHLAND REGION

PASSENGERS CARRIED AND VEHICLE MILEAGE OPERATED BY POSTBUS ROUTES 1993-94. (arranged in descending order of patronage).

Order	Route	Passengers	Vehicle Mileage
1.	Elgol to Broadford	4,326	21,494
2.	Laide to Achnasheen	2,150	28,968
3.	Durness to Laing	1,555	52,333
4.	Lochinver to Laing	1,552	42,195
5.	Talmine to Tongue and Laing	843	35,874
6.	Alligin to Kinlocheive	691	24,686
7.	Armadale to Melvich and Thurso	635	17,839
8.	Skerray to Tongue and Malvich	421	32,868
9.	Gairloch to Melvaig and Redpoint	406	25,417
10.	Applecross to Shieldaig	352	41,960
11.	Duvegan to Glendale	329	19,875
12.	Durnell to Laing via Altraharra	280	45,531
13.	Lochinver to Drambeg	199	15,569
14.	Rogart to Muie and Laing	191	18,706
15.	Invergordon to Kildermorie	181	19,497
16.	Rogart to Scibercross	137	14,035
17.	Newtonmore to Kinlochlaggan	117	17,697
18.	Arinsdale to Kyle	113	30,919
19.	Strathconon to Muir of Ord	102	26,333
20.	Dunvegan to Waternish	99	12,383
21.	Scourie to Elphin	85	17,125
22.	Grantown on Spey to Lochindorb	79	16,514
23.	Thurso to Wick	78	21,349
24.	Ballachulish to Fort William and Glen Etive	55	30,836
25.	John O'Groats to Wick	54	23,954
26.	Dingwall to Dochorty	53	12,813
27.	Nairn to Glenferness	47	21,034
28.	Inverness to Gorthleck	33	29,167
29.	Scourie to Kylestrome	31	13,195
30.	Inverness to Tamatin	30	24,168
31.	Ardgay to Strathoykel	27	18,078
32.	Fort William to Garvan (circular)	26	17,019
33.	Ardgay to the Craigs	22	13,161

34.	Shieldaig to Kishorn	22	12,899
35.	Kyle to Plackton and Stromferry	21	15,572
36.	Halkirk to Altnabreac	12	20,652
37.	Poolewe to Cove	12	12,753
38.	Dalvinnie to Drummin	11	16,477
39.	Lairg to Altass and Rosehall	10	24,086
40.	Bettyhill to Kinbrace	8	27,162
41.	Drumnadrochit to Groataign and Actemarack	7	15,061
42.	Invergarry to Kinlochown	5	13,693
43.	Kinbrace to Melvich	2	20,332
44.	Kyle to Letterfeam	2	22,068
45.	Invergarry to Fort Augustus	1	11,062
	TOTAL HIGHLAND REGION (45 services)	15,412	1,024,409

Source: Royal Mail

15 routes which each carried less than 30 passengers in 1993-94. Passengers usage thus tends to vary throughout the postbus network which only makes a major contribution to the movement of passengers in the case of about seven routes which each carried more than 500 passengers annually.

7.3.7 In 1993/94 five postbus services were supported by the Regional Council at a total cost of £17,136. This support will be limited in 1994/95 to a total cost to the Council of £22,396 for 14 services. The basis for the calculations of the cost of subsidy is that the Royal Mail request the Council to meet the extra costs (less the extra income) resulting from the operation of a postbus instead of a post van. Extra costs include the greater capital cost of the postbus vehicle, also higher running costs and higher costs of administration, licence and insurance. Extra income arises from fares, but also from fuel tax rebate for which postbuses (but not post vans) are eligible.

7.3.8 The Regional Council has adopted a policy with regard to the subsidisation of postbus services of limiting its support to those postbuses which carry more than one passenger in each direction each operating day. As there are 309 operating days per year this means that the Council has declined to support any postbus service carrying less than 618 passengers a year (12a).

7.3.9 The proposed privatisation of the post office (Royal Mail and Parcel Force, but not Post Office Counters) could have a radical long term effect on the pattern of postbus operation in Scotland. The Union of Communication Workers (Post Office Union) consider that, given existing commercial pressures, it is unlikely that Royal Mail (which is currently responsible for postbus opertions) would guarantee the future of postbus services in the event of privatisation (12b). However, the proposal was dropped by the Conservative Government on 4 November 1994 and perhaps may not be resurrected during the life of the present Conservative Government.

7.4 THE EXTENT OF THE POSTBUS NETWORK

7.4.1 Figure 7.1, as already stated, shows the network of postbus routes currently operating in the Highland Region. The popularity of postbus services in the region as a mode of unconventional public transport is demonstrated by the fact that in 1993/94 they operated over 1,024,409 vehicle miles. Patronage and vehicle mileage of individual services is shown in Table 7.2. This table demonstrates the extreme variability in patronage of the 45 routes currently operating in the Highland Region. The number of passengers varies up to a maximum of 4,326 on the Elgol to Broadford service. Ten of the 45 services carried school children as well as fare paying passengers.

7.4.2 The prime function of postbus services is to deliver mail so that services will continue to operate regardless of the changing demands of passengers. The movement of passengers is regarded as a secondary role by the post office and is ancilliary to the carriage of mail. Thus if no passengers use the service on some journeys the postbus can be replaced by a post van. This is less of a tragedy to Royal Mail than it would be to a commercial bus operator who relies solely on passenger revenue. The postbus network therefore functions from the point of view of local residents as a standby facility which is there to provide an emergency service when the family car is unavailable.

7.5 ALTERNATIVE MODES OF UNCONVENTIONAL PUBLIC TRANSPORT

7.5.1 The postbus is currently (1992-93) the only mode of unconventional public transport in the Highland Region. The development of community bus services as an alternative mode was investigated in August 1990 (13). A community bus service is defined in the Transport Act 1985 (Section 22) as a local service provided

(a) by a body concerned for the social and welfare

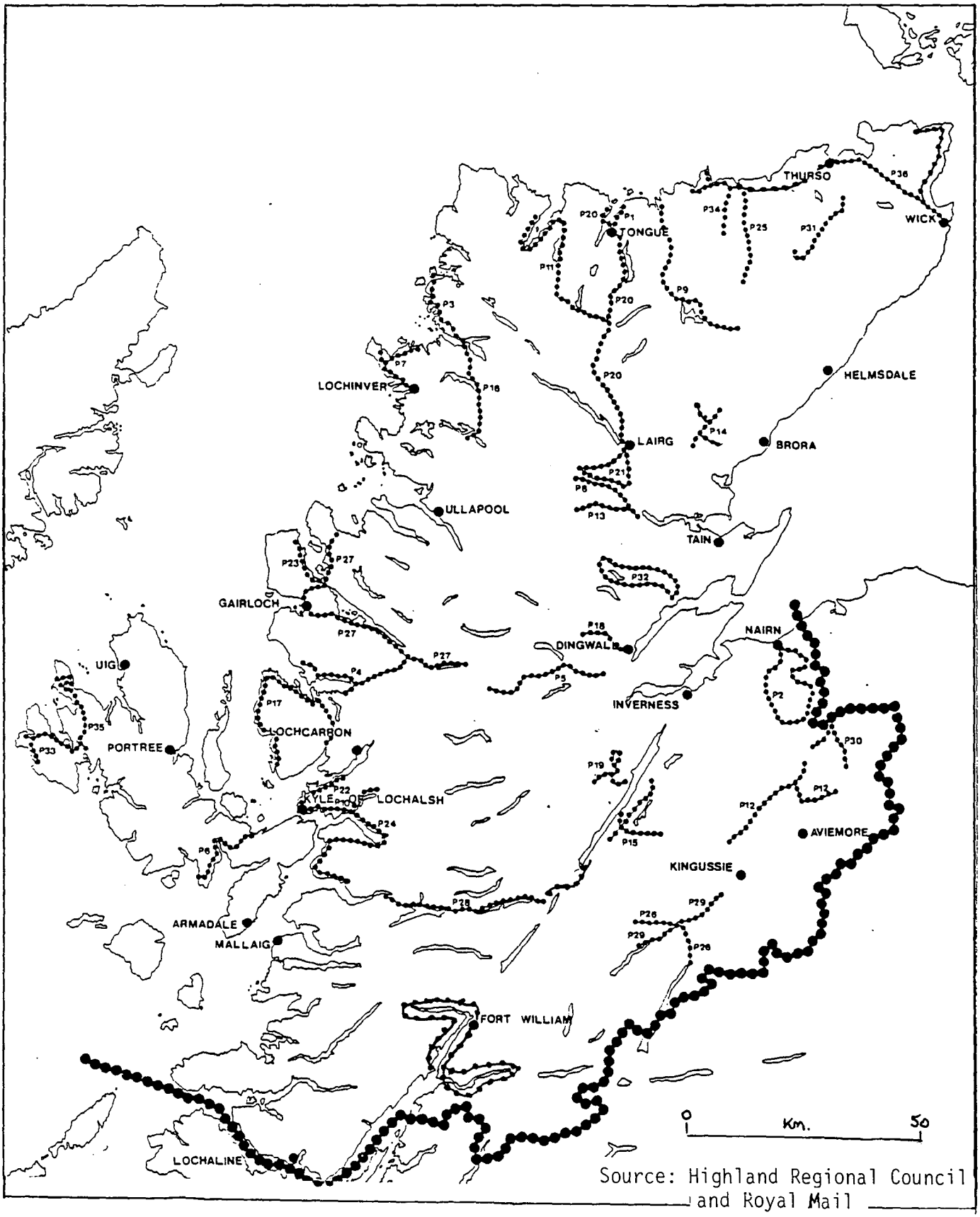

FIGURE 7.1 HIGHLAND REGION:NETWORK OF POSTBUS SERVICES 1992-93.

needs of one or more communities;
(b) without a view to profit, either on the part of that body or of anyone else; and
(c) by means of a vehicle adapted to carry more than eight, but not more than 16, passengers.

Section 23 of the same Act specifies that the driver must be a volunteer, not receiving payment for driving.

7.5.2 There is no barrier preventing holders of Community Bus permits from tendering for the provision of appropriate bus services in the Highland Region. Indeed, such tenders would be welcomed by the Regional Council, as the use of volunteer drivers, coupled with the absence of any profit element in the tender, would make such tenders highly competitive and attractive (14).

7.5.3 The community bus introduces a greater element of flexibility into bus operation in that it operates on different days of the week in different directions and fulfilling different journey purposes. Thus, on one day it can provide a market day service into the local market town, on another day it can run direct to the local hospital or doctor's surgery for hospital visiting or medical attention, while on yet another day it can provide a direct connection with a mainline rail service. The route and timing of the community bus can be altered or adjusted to meet local needs, unlike the regular, scheduled, conventional bus service which operates to a set timetable and operates along a fixed route with fixed stopping points.

7.5.4 There are currently no holders of community bus permits in the Highland Region. However, services were operated in the past between Durness and Lockinver and between Durness and Tongue, but these services were shortlived. Other Regions of Scotland report a very small and still declining number of community bus

permit holders (Borders 2, Dumfries and Galloway 1, Grampian 7, Stathclyde 1, others nil). The total number of community bus services operating in Scotland in August 1990 was eleven. (15).

7.5.5 Recent studies of the potential for the further development of community bus services in the United Kingdom have included those by Balcombe and Dredge (16), Banister (17), the Department of Transport (18), McLaren (19) and Norfolk County Council (20). The conclusions reached by these studies vary, but most are optimistic and recommend the investigations of this type of innovatory public transport in suitable rural areas.

7.5.6 The operation of community bus services in the Highland Region (for example as an alternative to postbus services) has proved difficult to initiate for the following reasons:

1. The difficulty of recruiting volunteer drivers.
2. The inability (by statute) to operate at a profit.
3. The problem of raising enough capital when the bus needs replacement.

However, the official policy of the Regional Council is that "the door should remain open for tenders from holders of community bus permits in the event of anyone in the Highland Region obtaining such a permit". (22)

7.5.7 Thus, the potential for the development of community bus services in the Highland Region appears to be limited due to the problem of recruiting volunteer drivers. It is for these reasons that the Regional Council has opted for the greater reliability of postbus services (operated in conjunction with school contract bus services) to meet the transport needs of

remote and inaccessible rural communities. In addition, the Regional Council have found that, even in the smallest communities, two vehicles are already available: the school minibus and the post van. By making the school bus available to the public and/or by introducing a postbus in place of the post van, a reasonable service can normally be provided. To introduce a third vehicle (the community bus) into such a community would only have the effect of increasing total costs and abstracting passengers from the other two vehicles.

7.6 INTEGRATION OF SCHOOL AND PUBLIC SERVICES

7.6.1 The Regional Council, with the co-operation of the bus operators, has had considerable success with the integration of school contract services and public service vehicles wherever possible. This has been achieved by retiming conventional public bus services to suit school requirements, thus avoiding the need for separate contracts for school pupils, or by making school contract services available to the public. In 1992-93 there were 44 such integrated services operating in the Highland Region (see Chapter 5). However, integration has not been possible in some cases, for example, where the number of school pupils is too great to be accommodated on the public service bus.

7.6.2 This integration has benefited both the Transport Committee and the Education Committee of the Regional Council. The Transport Committee benefit by the extra traffic carried on the public services, thus reducing subsidy requirements for the routes. The Education Committee, on the other hand, benefit because the cost of season tickets on the public service is less than the cost of the former school contract services. (23).

7.6.3 Thus, the development of unconventional public transport in the Highland Region not only facilitates movement between rural areas and the main urban

centres, but also has an important secondary, if psychological, role in that it helps to diminish the sense of isolation which would otherwise be felt in the more remote areas.

II THE BORDERS REGION

7.7 INTRODUCTION

7.7.1 The Borders Region is currently (1992-93) served by twelve postbus services, one community bus, seven supported voluntary social car schemes and twelve school contract services which are also available for use by fare-paying passengers. In addition there are four Border Courier services. These are scheduled bus services using multi-functional vehicles which carry both passengers and freight, in this case, medical supplies between hospitals and dispersed doctors' surgeries. It will be convenient to discuss the role of each of these unconventional modes in turn.

7.8 Postbus SERVICES

7.8.1 As previously stated there are twelve postbus services operating in different parts of the Borders Region. Table 7.3 lists these services and indicates passenger usage during the period 1989-90 to 1992-93. It also reveals the level of subsidy per passenger for supported services. It is evident that in 1992/93 postbuses in the Borders Region carried a total of 3,596 passengers with a subsidy of £11,101 or £3.09 per passenger. It is apparent that there has been a variable level of usage of these services during the period under review, but that the number of passengers rose by only 1.6% overall.

7.8.2 Subsidy per passenger from the Regional Council to retain these services has risen from only £0.88 in 1989-90 to £3.09 in 1992-93. Thus, the cost of supporting postbus services to enable the post office to adapt its post van routes to meet the requirements of the Regional Council has increased.

TABLE 7.3

BORDERS REGIONAL COUNCIL - POST-BUS TRAFFIC RETURNS 1989 TO 1993

ROUTE	1989-90			1990-91			1991-92			1992-93		
	Pass	Subs	Per Pass	Pass	Subs	Per Pass	Pass	Subs	Per Pass	Pass	Subs	Per Pass
		£	£		£	£		£	£		£	£
Duns - Longformacus/Abbey St Bathans				166	171	1.03	193	1,612	8.35	232	1,615	6.96
Hawick - Craik				87	250	0.35	148	1,630	11.01	295	765	2.59
Hawick - Bonchester Bridge	2,469	369	0.14	1,523	406	0.27	1,029	1,709	1.66	1,357	1,314	0.97
Kelso -Stichill	391	1,462	3.74	301	1,462	3.74	310	1,466	4.73	542	1,586	2.93
Kelso - Hassington/ Smailholm				125	333	2.66	247	1,686	6.82	234	1,462	625
Kelso - Roxburgh				149	116	0.78	146	1,501	10.28	171	884	5.17
Melrose - Maxton				58	0	0	98	1,586	16.18	111	946	8.52
Melrose - Lilliesleaf	681	1,294	1.90	554	1,596	2.88	454	2,039	4.49	606	1,620	2.67
Peebles - Manor Valley				3	399	133.00	96	1.550	16.15	44	877	19.93
Peebles - West Linton	(Subsidy refused since 1985)											
Selkirk - Ashkirk				1	131	131.00	2	1,633	816.50	4	911	227.75
Biggar - Tweedsmuir	(No subsidy requested since 1985)											
TOTALS	3,541	3,125	0.88	2,967	5,106	1.72	2,723	16,412	6.03	3,596	11,101	3.09

Claim for 1985-86 was £9,645 total. No claims were submitted between 1986 and 1989 because of Transitional Rural Bus Grant.

7.8.3 In 1992/93 postbus services operated a total of 214,020 vehicle-miles throughout the Borders Region. It is noted that postbus services carried a total of 43 schoolchildren over seven routes in the same year. Postbus services are increasingly fulfilling a role (as in the Highland Region) as movers of school-children in the more isolated parts of the Region where conventional bus services do not penetrate.

7.9 **COMMUNITY BUS SERVICES**

7.9.1 There is currently one supported community bus service in the Region. The first community bus service in Scotland was launched by the Ettrick and Yarrow Community Council in July 1982 and operated four journeys per week between Ettrickbridge and Selkirk. This was followed in May 1984 by a community bus from Bonchester Bridge operated by the Southdean and Hobkirk Community Council. This was believed to be the fourth scheme in Scotland. This scheme provided one return journey per week to Jedburgh and one return journey to Hawick.

7.9.2 The following table provides a record of passenger journeys on the Ettrick and Yarrow service, using available statistics.

TABLE 7.4

ETTRICK TO YARROW COMMUNITY BUS SERVICE

Year	Passengers
1982/83	489
1983/84	655
1984/85	677
1986/87	955
1990/91	1,290*
1991/92	2,114

* Service expanded in Jan 1991 to provide additional return journeys.

Source: Borders Regional Council.

7.9.3 The Bonchester Bridge service recorded 336 passenger journeys in 1984, but further traffic returns were not provided. Early in 1990 the organisers of the service requested financial support from the Regional Council, but investigation showed that they were suffering management and volunteer recruitment difficulties as well as financial problems. The service was consequently withdrawn in November 1990, although the route from Bonchester Bridge to Hawick was continued by a commercial operator on contract to the Regional Council.

7.10 **THE USE OF SCHOOL VEHICLES BY FARE-PAYING PASSENGERS**

7.10.1 In 1992-93 there were 26 school contract services operating in the Borders Region which were also available for use by fare-paying passengers. In 1981 a policy decision was made by the Regional Council that:

1. Where a school service had space for additional passengers after taking account of all school arrangements.
2. Where a request has been received for a public service to be provided.
3. Where this would not conflict or compete with any other public bus service,

then a permit under Section 30 of the Transport Act 1968 would be sought for the school bus.

7.10.2 Each school route was individually assessed against these criteria and a number of routes were made available to the public, including three routes operated by the Council's own vehicles. From 1983 this policy was extended to allow that where a significant regular traffic of fare-paying passengers was

identified, the service would be extended to continue through school holiday periods. These services were then licensed with a full Road Service Licence. Subsequently the number of routes which are licensed/ registered has tended to vary a little from year to year according to the level of demand and availability of spare capacity.

7.10.3 The use of school vehicles by fare-paying passengers, where spare capacity exists, makes the entire school bus network potentially available for use by the general public. The Regional Education Authority are required under the terms of Section 55 of the Education Act 1944 to provide free transport for pupils residing beyond certain defined minimum distances from school. It seems logical, therefore, to make spare capacity available to the general public. In this way they can use the school vehicle as a standby public transport facility which can enable them to reach the local market town or the regular bus stop where they can pick up a regular scheduled bus service. The comprehensiveness of the school bus network potentially available to adult passengers is reflected in the fact that in 1993/94 free school transport was provided for a total of 4,000 scholars distributed throughout the Region.

7.11 THE BORDER COURIER SERVICE

7.11.1 The Border Courier service was introduced by the Regional Council in May 1979. The service comprises a system of combined goods and passenger vehicles operating across the Region. Goods are carried on behalf of the Borders Health Board in a multi-functional vehicle which is adapted to carry both passengers and freight. Although routes are designed primarily to meet the requirements of the goods service, they are also adapted to run through areas with little or no conventional public transport.

Thus, a public transport benefit is obtained as a spin-off from the movement of essential medical supplies around the Region. The passenger facility is the prime reason why the Regional Council has taken the initiative in designing and co-ordinating the scheme on behalf of the other users, and also is the reason why the Scottish Development Department have provided financial assistance for the initial experimental period. However, the goods function is the backbone of the service (24). In 1993/94 it accounted for 36% of income, compared to 24% from passengers' fares.

7.11.2 The service is operated by four specially adapted minicoaches providing a separate luggage compartment, accessed from the rear, and seats in the main compartment for passengers. The vehicles operate over four routes from the outer parts of the Region into Galashiels and the Borders District General Hospital bringing in medical samples for laboratory analysis and returning each afternoon with supplies to the hospitals in the smaller towns. The passenger services enable shopping trips to be made into Galashiels from many areas with no other public transport. Journeys into Selkirk, Duns, Kelso, Lauder, Eyemouth and Earlston are also possible. (25)

7.11.3 The service has proved reliable for the needs of the Borders Health Board and there are no security problems. Despite the fact that the vehicle carries drugs and medical supplies between hospitals and clinics, the goods compartment is kept physically separate from the passenger section of the bus and is kept securely locked at all times (26). No theft has occurred.

7.11.4 Patronage of the Borders Courier Service is illustrated in Table 7.5 which also shows trends since the service was introduced in May 1979.

TABLE 7.5

PATRONAGE OF BORDER COURIER SERVICES

Year	C1	C2	C3	C4	Total
1980	98	47	63	162	369
1981	123	55	60	203	419
1982	102	39	76	282	500
1983	89	53	105	309	556
1984	88	75	96	285	544
1985	80	72	107	304	563
1986	108	73	89	345	615
1987	141	75	129	410	755
1988	155	86	114	325	679
1989	118	87	118	265	588
1990	89	94	108	276	567
1991	86	66	92	251	495
1992	80	60	45	212	396

Source: Borders Regional Council.

7.11.5 This table shows that the number of passengers carried by the four Border Courier Services rose to a peak in 1987, immediately following bus service de-regulation, but subsequently declined to around its 1980 levels. This subsequent decline is probably largely due to rising levels of car ownership in the Region, especially the growth in the percentage of two car owing households from 15.1% in 1981 to 21.1% in 1991 (27).

7.11.6 The four courier services operated along the following routes in 1992-93.

Courier 1: Peebles - Yarrow Valley - Selkirk Galashiels - Borders General Hospital.

Courier 2: Hawick - Jedburgh - Borders General Hospital - Galashiels.

Courier 3: Borders General Hospital - St Boswells - Kelso - Coldstream.

Courier 4: Jedburgh - Kelso - Duns - Eyemouth (with extensions from Galashiels to Edinburgh).

Figure 7.2 shows the network of courier routes as at 1992-93 in the context of the total public bus network of the Region.

7.12 **CONCLUSIONS**

7.12.1 The above account has outlined the role of defined unconventional public transport services in the Highland and Borders Regions. The predominance of postbus services in the Highland and Courier services in the Borders Region will be immediately evident. Other modes are absent in the Highland Region due to a deliberate Council policy of concentrating on postbuses, supplemented by school vehicles, to meet the occasional public transport needs of outlying and remote communities which would otherwise not be served by conventional bus services. In the Borders Region voluntary social car schemes and a community bus service, with several postbus services, have been developed to supplement the courier service.

7.12.2 Thus, unconventional modes of public transport perform a vital role as a supplementary facility in areas with high levels of car ownership and a rudimentary network of conventional bus services. Although the number of passengers carried by these modes (as outlined above) is relatively small, compared with users of conventional bus services, they function as a standby facility in areas which would otherwise be devoid of public passenger transport. They also provide an emergency service for those who may not have access to the family car, during the week, when it is needed by the head of the household for the daily journey to work. The 1991 census has revealed a progressively aging population in rural areas, who may be able to afford a private car, but who, because of physical

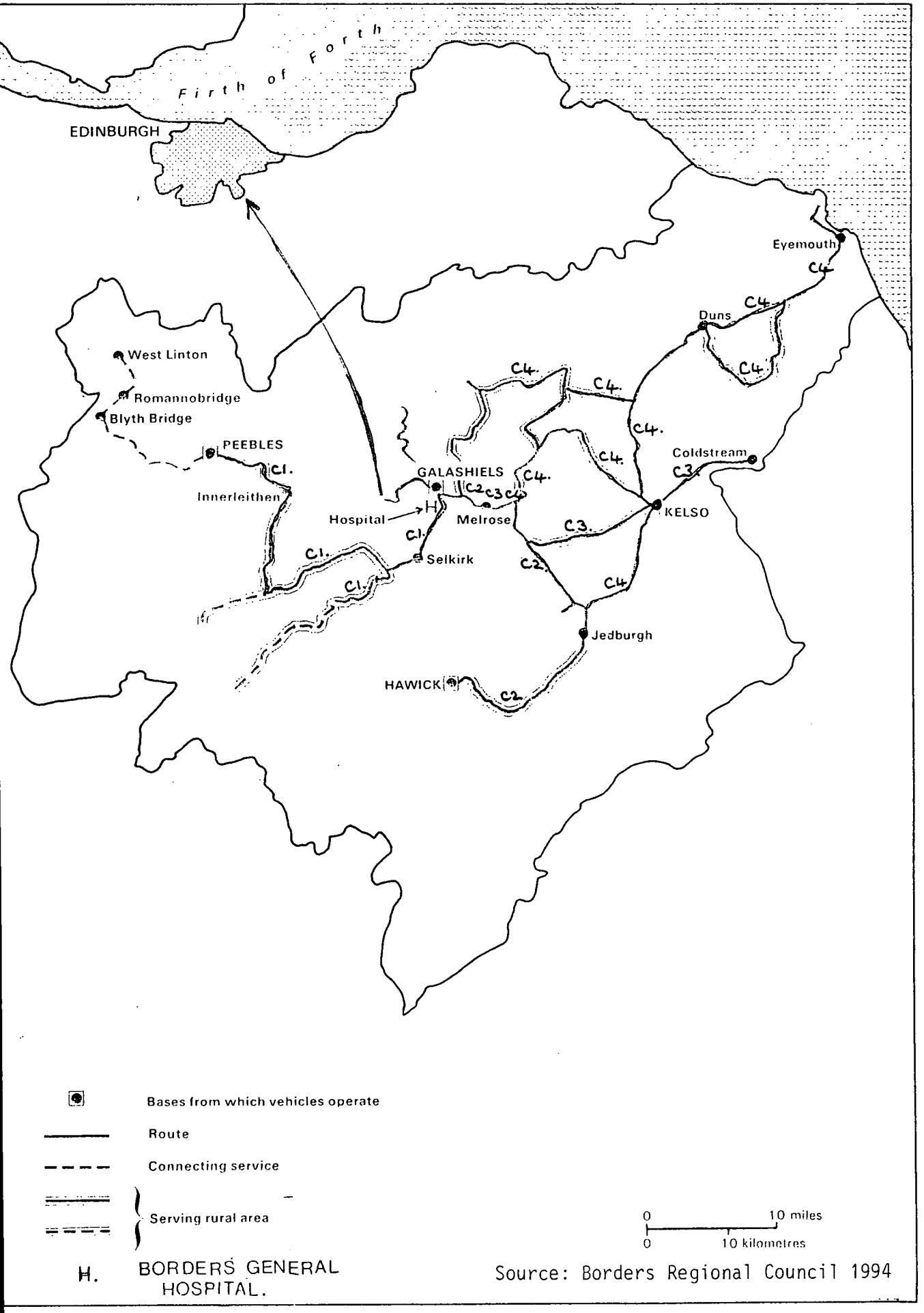

FIGURE 7.2 BORDERS REGION:COURIER SERVICE ROUTES 1994.

difficulties, may be unable to drive one and hence must rely on unconventional modes as an emergency service. The role of unconventional public transport in such circumstances may, therefore, be an important one.

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CHAPTER EIGHT

POSSIBLE FUTURE SOLUTIONS TO PROBLEMS OF INACCESSIBILITY IN RURAL AREAS

8.1 INTRODUCTION

8.1.1 This chapter discusses the basic characteristics and strengths and weaknesses of the defined unconventional public transport modes with special reference to their use in rural Scotland. It assesses the potential for the more widespread operation of innovative transport in areas where its value has, so far, not been recognised. These modes can provide future solutions to the problems of remoteness and inaccessibility which are encountered throughout rural Scotland within the constraints imposed by existing transport legislation. The principal innovative forms of public transport, discussed, in turn, in this chapter are as follows:

1. post bus services;
2. community bus services;
3. voluntary social car schemes;
4. the use of school vehicles by fare-paying passengers.

8.2 POSTBUS SERVICES

8.2.1 It has been Royal Mail policy in Scotland, as well as in England and Wales, to consider providing postbus services only if the following conditions can be met (1).

1. A need for the service should be demonstrated;

2. There should be no other competition with other bus operators;

3. The service should fit in with mail operating requirements;

4. Local authority financial support should be forthcoming where necessary.

However, Divisional Managers of the Royal Mail are empowered to exercise some degree of discretion in judging local circumstances. For example, they might be prepared to consider the possibility of some modification to postal service timings should this be acceptable to both the Royal Mail and the local community (2).

8.2.2 Basically, the additional cost of converting a delivery van run into a postbus service is simply the difference between the higher capital cost of the minibus against the cost of a post office van, approximately twice as much. However, it is also necessary to take into account the following (3).

1. Higher fuel consumption and maintenance costs. However, fuel costs can be reduced by fuel tax rebate.

2. The cost of certification for a public service vehicle license.

3. Driver training and other associated costs.

8.2.3 Additional expenditure, however, can also be incurred from the change of use from postvan to postbus by the higher capital costs of hiring a minibus. This can be almost twice as much, as illustrated in the typical example shown in Table 8.1. Other expenditure results from the higher annual depreciation of the vehicle, higher

TABLE 8.1

COMPARISONS BETWEEN COST OF OPERATING A POST BUS AND A MAIL VAN

HIGHLAND REGION						
PROPOSED ROUTE:1993/94 ALLIGIN TO KINLOCHEWE (HIGHLAND) (MINIBUS)						
LENGTH OF CONTRACT 1 YEAR 25,048 VEHICLE MILES 800 PASSENGERS					POSTBUS	MAILVAN
					£	£
A Recuring Standing Charge						
	Postbuses	804	x	1	804	
	Mailvans	605	x	1		605
B VHS Charges						
	Postbuses	2998	x	1	2998	
	Mailvans	1997	x	1		1997
C Reserve / Hire Standing Cost						
	Postbuses	376	x	1	376	
	Mailvans	258	x	1		258
	Hire	0	x	1	0	
D Running Costs						
	PB1	4348	X	1	4348	
	OMV1	3292	X	1		3292
E Total Vehicle Operating Costs: (A+B+C+D)				(i)	8527	6130
				(ii)	6130	
F Marginal Vehicle Operating Costs : (Ei - Eii)					2397	
G Administration Costs		1048	x	1	1048	
H Other Costs		402	x	1	402	
I Less Revenue (Fares and Fuel Duty Rebate)					1845	
J Royal Mail Profit		15%			424	
K Marginal Operating Costs		(F+G+H+J-I)			2417	
L Annual Operating Costs (i.e. Subsidy Required)					2610	

Source: Postbus Controller, Inverness 1994

administrative costs and higher cost of the license and insurance, higher staff costs (resulting from a £200 annual drivers allowance and higher running costs due to the operation of greater vehicle mileage.

8.2.4 Additional revenue from the changeover can be derived from passenger fares and fuel tax rebate. Postbus services continue to be eligible for fuel tax rebate as public service vehicles. This amounts to 6.83 pence per vehicle mile. Thus, the post office receives a considerable hidden subsidy from central government in the form of fuel tax rebate. In addition, New Bus Grant was available for the purchase of postbuses (50% grant) until it was finally phased out in 1984.

8.2.5 Postbus services are exempt from competitive tendering under the provisions of the 1985 Transport Act if their total revenue is less than £8,000 annually. This "de minimis" limitation excludes most postbus services. They continue to be operated under the terms of Section 30 of the Transport Act 1968 where they are often referred to as "Section 30 Remit Services".

8.3 **THE INTEGRATION OF POSTBUS AND SCHOOL BUS SERVICES**

8.3.1 It is possible to combine postbus services with school bus services in order to provide two return journeys daily into the local urban centre (provided that there is a garage and driver located in an outer village), eg,

EARLY AM: Journey by school service into town;
LATE AM: Return by postbus service from town;
EARLY PM: Postbus service into town;

LATE PM: Journey by school service from town.

Thus, two return journeys daily into the local market town can be achieved by using a combination of school and postbuses.

8.3.2 Integration between postbus services and conventional bus services can also be achieved through the tendering process by defining the timetable required for the regular bus service and assuring that it connects with the neighbouring postbus service.

8.4 THE DISTRIBUTION AND USE OF POSTBUS SERVICES IN SCOTLAND

8.4.1 Figure 8.1 shows the distribution of postbus services in Scotland in 1992/93. In that year there were 144 routes carrying 80,286 passengers and operating 2,844,758 vehicle miles. Table 8.2 shows the distribution of services throughout the United

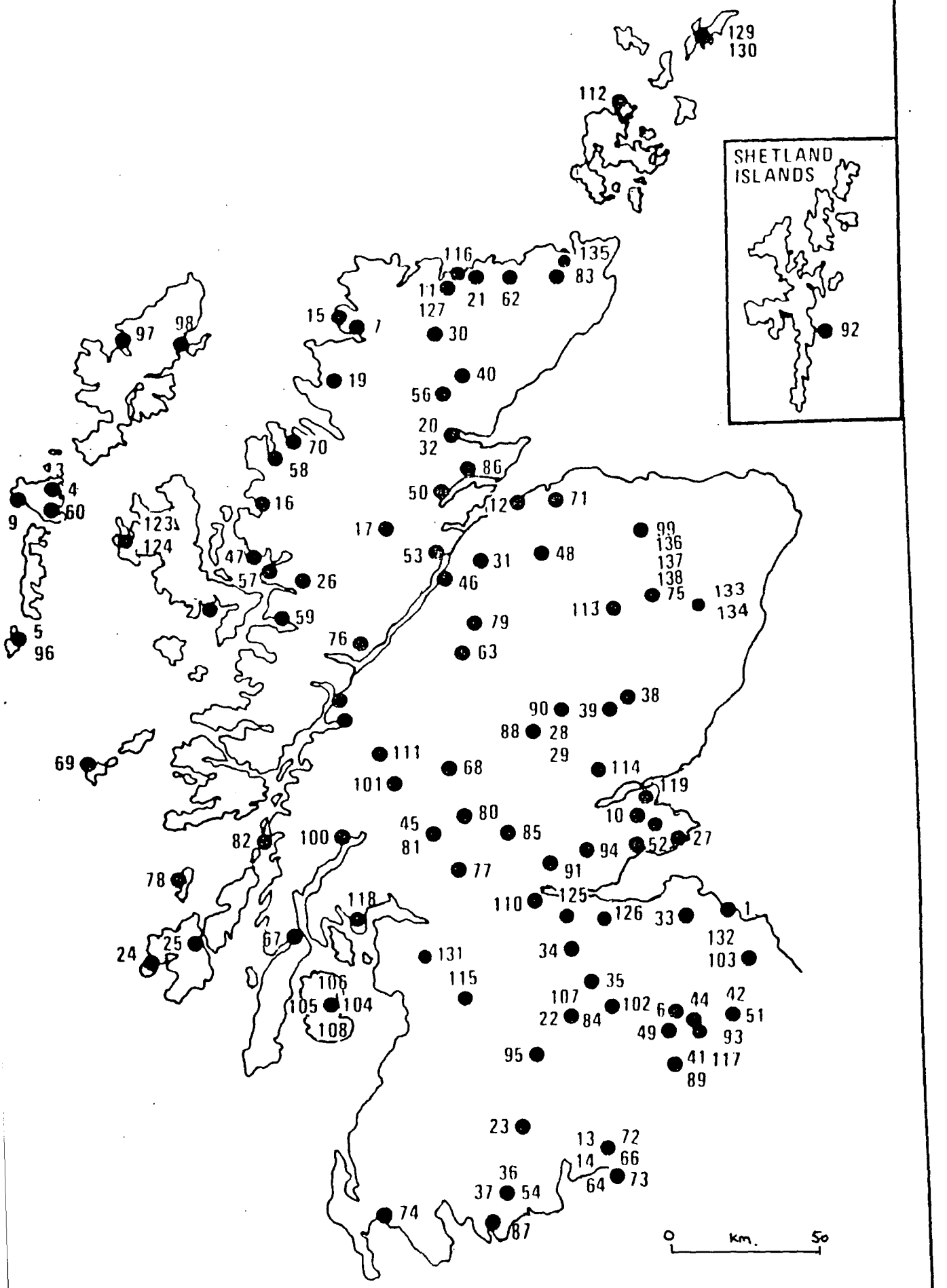


FIGURE 8.1 LOCATION OF SCOTTISH POSTBUS SERVICES 1992-93.

TABLE 8.2.

The Royal Mail Postbus Service
Annual Divisional Statistics

Division	1993/1994				1992/1993				1991/1992			
	No of Routes	No of Passengers	Total Fares	Annual Mileage	No of Routes	No of Passengers	Total Fares	Annual Mileage	No of Routes	No of Passengers	Total Fares	Annual Mileage
Midlands	4	2458	2311	68055	0	0	0	0	0	0	0	0
North East	12	12157	9931	269484	11	12692	10292	267156	11	12612	9389	208448
South West & South Wales	4	3696	1904	74636	4	3472	1904	74602	4	3586	1783	66733
North West & North Wales	19	19326	19532	365967	15	18621	15388	317292	14	16198	13615	293618
South East	19	12186	8941	275925	8	8327	4241	131187	8	6938	3386	117279
South Central	11	5595	4513	117014	4	4438	3609	69044	4	5232	4524	63201
Scotland	146	79000	58472	2882553	144	80286	55120	2844758	139	78636	48761	2595948
National Totals	215	134418	105605	4053634	186	127836	90554	3704039	180	123202	81458	3345227
% Changes 1991/92 to 1992/93 to 1993/94	15.59%	5.15%	16.62%	9.44%	3.33%	3.76%	11.17%	10.73%				

SOURCE ROYAL MAIL.

Kingdom by Post Office Division for the years 1991/92, 1992/93 and 1993/94. The majority of services (77%) are concentrated in Scotland which also accounted for 63% of all postbus passengers carried in 1992/93. It is also noted that nationally the number of passengers carried in the United Kingdom rose by 3.76% between 1991/92 and 1992/93 and by 15.15% between 1992/93 and 1993/94. There has, therefore, been a perceptible growth in postbus operations since 1991/92 reflected in the number of routes, passengers carried and vehicle miles operated.

8.4.2 Table 8.3 shows patronage of postbus services in Scotland by Region in 1992/93. Statistics for Northern Ireland are included since this part of the United Kingdom was included with the Scottish Division. However, the number of passengers carried in Northern Ireland was only 52 in 1992/93. It is noted that the Highland Region accounts for 19% of passengers and 34% of postbus vehicle mileage in Scotland. The Borders Region postbus services carried 5% of Scottish passengers and operated 7% of vehicle mileage in 1992/93. Table 8.4 shows that the highest rate of growth in number of passengers carried between 1991/92 and 1992/93 was experienced by the Highland Region. The Borders Region also experienced a significant growth in patronage during this period.

8.4.3 Table 8.5 and Figure 8.2 show monthly variations in passengers using postbus services in each of the Scottish Regions in 1992/93. It is noted that there is considerable seasonal variation in the number of passengers carried in the Highland Region with a distinct peak during the months of July, August and September. This would imply that postbus routes in

TABLE 8.3.

POSTBUS STATISTICS.

1992/1993 Divisional Summary by Regional Council

Regional Council	Passengers	£ Fares	Mileage
Borders	3636	1905	193253
Central	9046	5651	141162
Dumfrieshire	7571	2416	251335
Fife	966	335	96233
Grampian	933	338	157226
Highland	15003	16121	977420
Lothian	5205	1846	93962
Orkney	172	116	49793
Shetland	217	59	7579
Strathclyde	24370	14026	439620
Tayside	4107	3506	264656
Western Isles	9008	8723	165199
Northern Ireland	52	80	7320
Totals	**80286**	**£ 55121**	**2844758**

SOURCE: ROYAL MAIL.

TABLE 8.4.

POSTBUS STATISTICS.

1991/1992 and 1992/1993 Divisional Summary Comparison

Passengers

Regional Council	1991/1992 Passengers	1992/1993 Passengers	Difference
Borders	2618	3636	+ 1018
Central	6962	9046	+ 2084
Dumfrieshire	11079	7571	- 3508
Fife	898	966	+ 68
Grampian	617	933	+ 316
Highland	11927	15003	+ 3076
Lothian	4719	5205	+ 486
Orkney	106	172	+ 66
Shetland	184	217	+ 33
Strathclyde	26417	24370	- 2047
Tayside	3589	4107	+ 518
Western Isles	9308	9008	- 300
Northern Ireland	n/a	52	+ 52
Totals	**78424**	**80286**	**+ 1862**

SOURCE: ROYAL MAIL.

TABLE 8.5.

POSTBUS STATISTICS.

Scotland & Northern Ireland Division

1992/1993 Passenger breakdown by Regional Council

Regional Council	Month Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Totals
Borders	302	245	262	386	317	296	371	328	195	323	300	311	3636
Central	986	760	875	1228	898	730	844	539	573	493	494	626	9046
Dumfrieshire	765	662	708	854	633	517	676	600	449	544	584	579	7571
Fife	60	48	699	194	193	92	67	52	44	34	68	45	966
Grampian	47	48	54	71	50	83	59	45	88	48	56	48	933
Highland	1075	942	1177	2057	2499	1822	1375	792	661	826	863	914	15003
Lothian	450	409	442	540	409	407	501	421	345	396	456	429	5205
Orkney	12	12	16	29	14	18	10	10	10	17	10	14	172
Shetland	37	4	20	21	13	18	24	3	9	25	23	20	217
Strathclyde	2457	1956	2195	2846	2241	1965	2145	1706	1570	1698	1779	1821	24379
Tayside	351	299	315	609	455	386	388	289	213	245	276	281	4107
Western Isles	818	876	889	1361	1031	776	802	484	488	486	485	512	9008
Northern Ireland											35	17	52
Totals	**7360**	**6261**	**7022**	**10196**	**8753**	**7101**	**7262**	**5269**	**4881**	**5135**	**5429**	**5617**	**80286**

SOURCE : ROYAL MAIL.

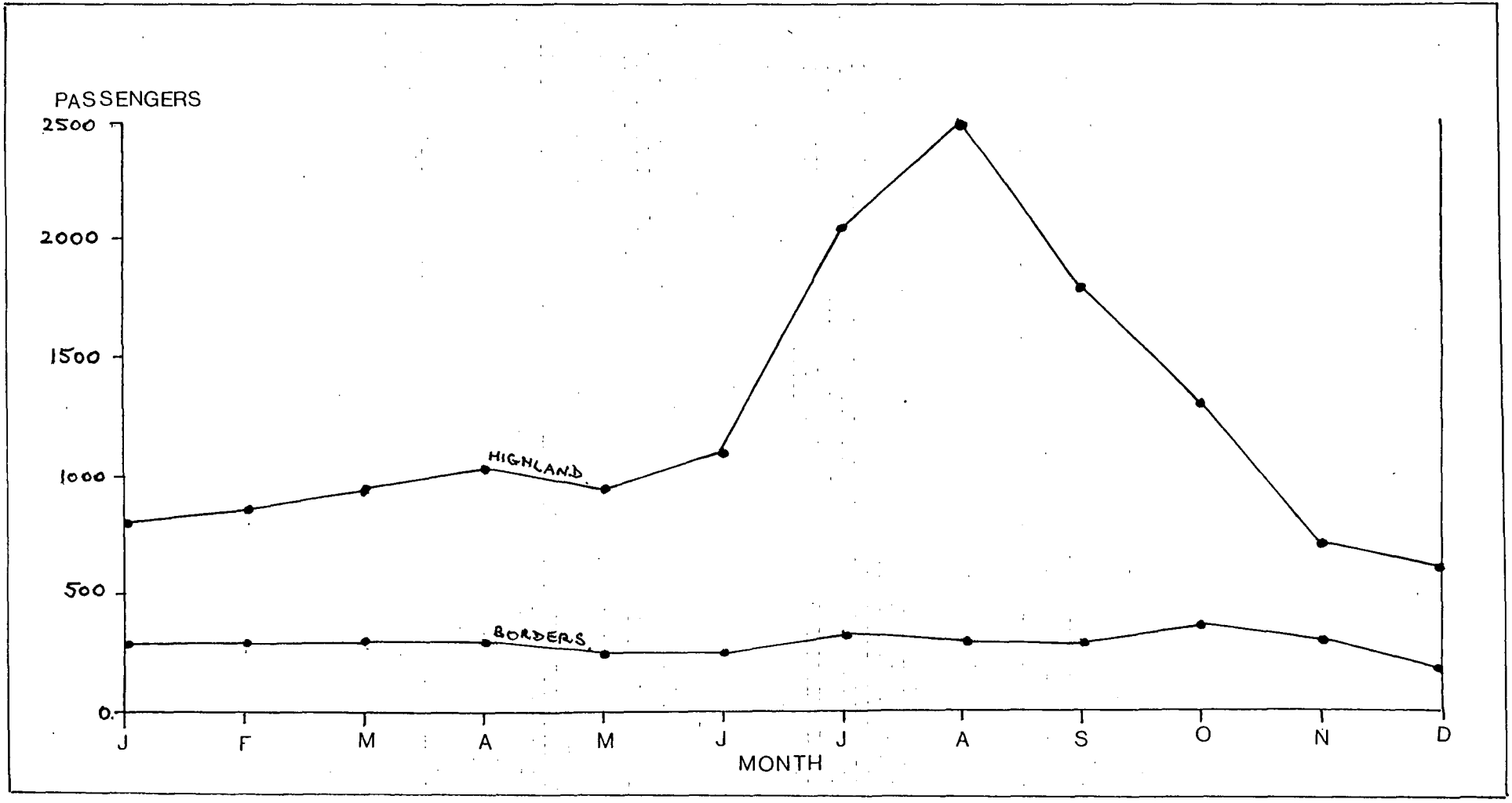


FIG. 8.2. HIGHLAND AND BORDERS REGIONS: SEASONAL VARIATIONS IN PATRONAGE OF POSTBUS SERVICES 1992/1993.

SOURCE: ROYAL MAIL.

the Region are popular with tourists who supplement local passenger traffic in the summer holiday season. This seasonal variation in patronage is not very evident in the Borders Region where the use of postbus services appears to be fairly constant throughout the year. The composition of passenger traffic thus varies between the two Regions with tourist traffic becoming an important element in the Highland Region and local traffic remaining constant throughout the year in the Borders Region.

8.4.4 Postbus services can also be used to carry schoolchildren on a regular basis. In 1991/92 postbus services in Scotland carried a total of 3,225 schoolchildren journeys. This was approximately 4% of all passengers carried during that year.

8.4.5 Thus, Scottish postbus services carry about 80,000 passengers per year and make a significant contribution to passenger movement by public transport in rural Scotland.

8.5 **THE WIDENING ROLE OF POST BUS SERVICES**

8.5.1 Royal Mail is currently (1994) committed to developing more postbus routes to serve the rural community (4). Revenue from postbus operations arises from fares, fuel duty rebate and grants from the Rural Development Fund or the Scottish Office in Scotland where they may be eligible for a 50% grant towards the cost of operation.

8.5.2 There has been no recent Trade Union opposition to postbus operation. Improved technology in the post office in the sorting of mail will make some postal workers redundant. Thus, postal staff generally

welcome the opportunity of driving a postbus as an alternative source of employment.

8.5.3 Spare postbuses standing idle at the post office are now being used to run off-peak bus services through the tendering system. The Royal Mail, in some areas of Scotland, is now involved in competitive tendering for the operation of bus services with the local authority. The first two tendered services in Scotland were the Durness-Lairg and the Lochinver-Lairg services in the Highland Region. The Royal Mail also now welcomes the opportunity to use postbuses for the carriage of schoolchildren and the additional revenue which this earns them from the Local Education Authority. In 1992/93 there were eight services in the Highland Region and seven in the Borders Region which carry schoolchildren under contract. The revenue earned from these school contracts helps to cross-subsidise loss-making routes.

8.5.4 The main source of revenue from postbus operation which accrues to Royal Mail is from Fuel Duty Rebate (5). This arises from the re-definition of the postbus as a public service vehicle. Revenue earned from fares is relatively small - only £16,220 in the Highland Region and £1,904 in the Borders Region in 1992/93 from 45 and 13 routes respectively. However, the prime function of the postbus remains the delivery of mail so that revenue from fares continues to be a supplementary source of income.

8.5.5 New routes which have been developed in the Highland Region during 1992 included Lairg to Durness and Lochinver to Lairg, as noted in Para 8.5.3 above, in the northwest extremity of the Region.

8.6 CONCLUSIONS REGARDING POSTBUS OPERATION

8.6.1 The Royal Mail is now adopting a more positive attitude towards postbus operation. While they are still constrained by their statutory duty under the terms of the Post Office Acts to deliver mail to each place of residence, they are quite prepared to substitute a postbus for a postvan provided the local authority cover any losses incurred. They also recognise the greater need for publicity of their services for the benefit of tourists. Thus, postbuses can now be used:

1. to carry schoolchildren;

2. to carry tourists and visitors to the area. Postbuses are now being advertised as tourist attractions at home and overseas.

3. to carry the disabled and elderly. Some postbuses are now being fitted with lifts to accommodate wheelchairs.

4. to provide a community bus service during the off-peak period and for private hire work, if necessary.

8.6.2 Postbus services can also benefit from a maximum grant of up to 50% of capital start-up costs from the Rural Transport Development Fund, administered by the Rural Development Commission in England and the Scottish Office in Scotland. However, Transitional Rural Bus Grant which was immediately available following the implementation of the Transport Act 1985, has now been phased out and is no longer available.

8.6.3 Thus, the conversion of a postvan route to a postbus route can be a potentially profitable step for the post office with additional sources of revenue from fuel tax rebate, passenger fares, Rural Development Commission (or Scottish Office) grants, local authority subsidy, school contract revenue and revenue earned from hiring out the postbus to other organisations. The postbus controllers are becoming increasingly aware of the financial advantages of developing a network of postbus routes in rural areas such as the Highland and Borders Region and of the considerable opportunities for earning additional revenue. The expansion of postbus services is thus a trend which seems likely to continue as a means of providing a low cost and flexible public transport service for remote and isolated communities which can sometimes match the convenience of the private car (6).

8.7 COMMUNITY BUS SERVICES

8.7.1 A community bus service is defined in the Transport Act 1985 (Sections 22 and 23)as a local bus service run on a voluntary, non-profit basis, using unpaid volunteer drivers and using 9 to 16 seat vehicles. The operators of a community bus service must obtain a Community Bus Permit from the Traffic Commissioner who will not grant it unless he is satisfied that there will be adequate arrangements for maintaining the vehicle in a fit and serviceable condition.

8.7.2 The number of community bus services has declined in recent years. There are now only eight community bus services in operation in Scotland which are supported by their Regional Councils. There is one in rural Strathclyde, one in the Borders Region and six in Grampian Region.

8.7.3 Many former community bus services have ceased to operate because of the difficulty of finding sufficient volunteer drivers on a regular basis, but also because of the problem of raising enough capital when the bus becomes due for replacement. It would seem, whatever their popularity in the past, community bus services are now in decline mainly due to the difficulty of recruiting a sufficient number of volunteer drivers (7).

8.7.4 The basic advantage of the community bus, as explained in Chapter 7 is its inherent flexibility. It can operate for different journey purposes and on different days of the week to different destinations, unlike the conventional bus service which runs to a fixed timetable along a fixed route with defined stopping points. However, it does not possess the extreme flexibility of "dial-a-ride", where routes and timing can be altered every week in response to the changing demands of passengers along the route.

8.7.5 The establishment of a community bus service has usually resulted from the enthusiasm and initiative of local residents. Very often it has become a partnership with the local authority providing advice and financial support, local residents providing the volunteer drivers and organisers and the local bus operator often providing the vehicle (8). However, a number of problems must be overcome if the service is to be launched successfully. The first of these is that there must be a sufficient number of committed volunteer drivers to operate the proposed service throughout the year. A 9-16 seat vehicle must be acquired to operate the service and sufficient funds raised to repair or replace the bus when necessary. In addition, the local community as

a whole must be committed to using the planned service on a regular basis and in sufficient numbers to make its operation worthwhile. (9)

8.7.6 The main sources of revenue to finance the project are generally:

1. passenger fares;

2. a grant from the Rural Transport Development Fund, administered by the Rural Development Commission in England, the Scottish Office in Scotland and the Welsh Office in Wales;

3. fuel duty rebate which is payable to all operators of public service vehicles;

4. a subsidy from the local authority to cover any losses incurred;

5. additional revenue earned from private hire on days when the vehicle is not being used as a community bus.

In general, labour costs tend to be minimal due to the use of volunteer drivers whose only remuneration is their personal expenses.

8.7.7 Thus, the community bus can sometimes be run as a cheaper service than the conventional bus with its high overhead and administrative costs and its higher labour costs. For this reason it has been developed in some rural areas of Scotland as a lower costs alternative to the subsidised conventional bus.

8.7.8 Community bus services tend to be most widely developed in the Grampian Region of Scotland where there are six services which are supported by the Regional Council. The relatively high number of services there is due to the policy of the Regional Council to make Education Department minibuses available to the communities concerned for a charge, currently about 20p a mile. When used as community bus services, the minibuses are driven by volunteer drivers who must pass the Region's minibus driver test. (Fuelling, maintenance, insurance and cleaning are all the responsibility of the Regional Council (10).

8.7.9 There are many other types of operation in rural Scotland using minibuses owned by schools, social clubs, churches, youth groups (eg Scouts, Guides, etc) including, for example, a very successful scheme based on Bettyhill in the north of the Highland Region using a "Help the Aged" minibus driven by volunteer drivers. This takes elderly people to the weekly lunch club, fortnightly shopping trips to Thurso and pensioners to clinics, evening meetings, etc. In the Borders Region there are three community transport schemes based in Kelso, Ettrickbridge and Galashiels, respectively. However, since such schemes cannot be used to provide services to the general public and can be used only to carry their own members or the clients of the organisation concerned, they may not be classed as public transport and hence do not fall within the defined terms of reference of this thesis, and are only mentioned in passing.

8.7.10 The community bus is an ideal mode of public passenger transport to link up an evenly dispersed settlement pattern whereas the postbus is best

adapted to serve a linear pattern of settlement strung out along a valley floor. Regional Council settlement policies are aimed at providing facilities and services for groups of settlements which can be conveniently connected by a flexible community bus service route. The latter can be diverted to link up this cluster of settlements. Key village settlement policies which concentrate new development at growth points within the settlement pattern, on the other hand, can be served most efficiently by a conventional bus route where the market for the bus service is concentrated along an established, single bus transport axis.

8.8 VOLUNTARY SOCIAL CAR SCHEMES

8.8.1 Voluntary social car schemes rely on volunteers driving their own cars for medical and other emergency journeys where no alternative public transport is available. There are currently a total of 14 such supported scheme in rural Scotland. They are sometimes organised by the Women's Royal Voluntary Service and supported financially by the Regional Councils. Each scheme is superintended by a volunteer liaison officer who receives requests from potential users and arranges transport (11).

8.8.2 The total annual cost of supporting such schemes in usually small, although the subsidy for passenger journey may be high (12). This reflects the generally low number of passengers using the service which is currently designed to alleviate hardship, being in many cases an emergency service (13). In the Borders Region provision for expenditure on social car schemes was £4,000 in 1988/89, but has been progressively increased to £24,000 in 1994/95 (25).

8.8.3 A voluntary social car service may be provided free of charge to the passenger or, in some cases, a small fare may be charged (say, about 10p per mile). The driver usually keeps the fare received and is reimbursed from the Regional Council. The transition from a free service to a paying scheme may not be smooth since many drivers who are quite prepared to make their private cars available for emergency trips for medical treatment are unwilling to undertake less essential social or shopping trips or to charge fares to elderly or disabled passengers. The co-operation of the volunteer drivers is paramount if the scheme is to be successful (14). Borders Regional Council introduced a fare paying scheme for their voluntary social car schemes in April 1992.

8.8.4 Thus, most voluntary social car schemes, in the Borders Region and in the rest of rural Scotland, do not, therefore, fulfil the role of an "alternative bus service". They are often a very specialised and vital facility operated by the goodwill of volunteer drivers who see their role as providing an emergency service for disadvantaged members of the community. (15)

8.8.5 Table 8.6 lists voluntary social car schemes which were in operation in 1992/93 in the Borders Region and which were also supported by the Regional Council and available for use by the general public (as opposed to specific client groups).

TABLE 8.6

BORDERS REGION - SUPPORTED VOLUNTARY SOCIAL CAR SCHEME 1992-93

Name of Scheme	Area Served
Cockburnspath Community Council	Cockburnspath
W.R.V.S. Berwickshire	Berwick District
W.R.V.S. Kelso	Kelso Area
Roxburgh Association of Voluntary Service	Jedburgh Area
Options	Hawick Area
Ettrick & Llauderdale Association of Voluntary Service	Ettrick & Lauderdale
Links	Peebles Area

Source: Borders Community Transport Group

8.8.6 The widespread development of voluntary social car schemes in Scotland dates from the 1978 Transport Act. This Act effectively removed from licensing all non-profit making private car sharing for vehicles with up to eight passenger seats. Passengers could now be carried in private vehicles subject to the following conditions.

1. The vehicle must carry no more than eight passengers.

2. Fares paid by the passengers must not exceed the running costs of the journey.

3. Arrangements for payment of fares must be made before the commencement of the journey.

The Transport Act 1978 thus legalised car sharing by fare-paying passengers. Its provisions were consolidated in the Transport Act 1980.

8.9 THE USE OF SCHOOL VEHICLES BY FARE-PAYING PASSENGERS

8.9.1 The use of school vehicles by fare-paying passengers has for many years been suggested as a logical

solution to the problem of immobility in the remoter rural areas. Under the terms of S55 of the Education Act 1944 every schoolchild over eight years residing more than three miles from school has the right to free school transport. This facility also applies to children under eight years who reside more than two miles from school. As a result, a very comprehensive network of school transport services already operates throughout rural Scotland linking most settlements with a schoolchild in residence, with the appropriate school. Expenditure on school transport is considerable. In 1993/94 it amounted to £1,594,000. (£648000 spent in the same year on revenue support to maintain the entire network of regular, conventional bus services in the Region) (16).

8.9.2 It is obviously desirable that some of this expenditure on school transport should be used to meet the transport needs of the rural community as a whole and not only schoolchildren (17). This is especially important in the context of the implementation of the Transport Act 1985 when finance available from the local authority to subsidise socially necessary, tendered services is strictly limited and it becomes even more essential to make full use of existing resources. The abolition of Transport Supplementary Grant from central government is yet another factor which has reduced the amount of money available to local authorities.

8.9.3 The economic advantage of the use of school transport by fare-paying passengers has long been recognised. The Report of the Committee on Rural Bus Services (the Jack Report), Para 114, referred to the possibility as long ago as 1961 (18). More

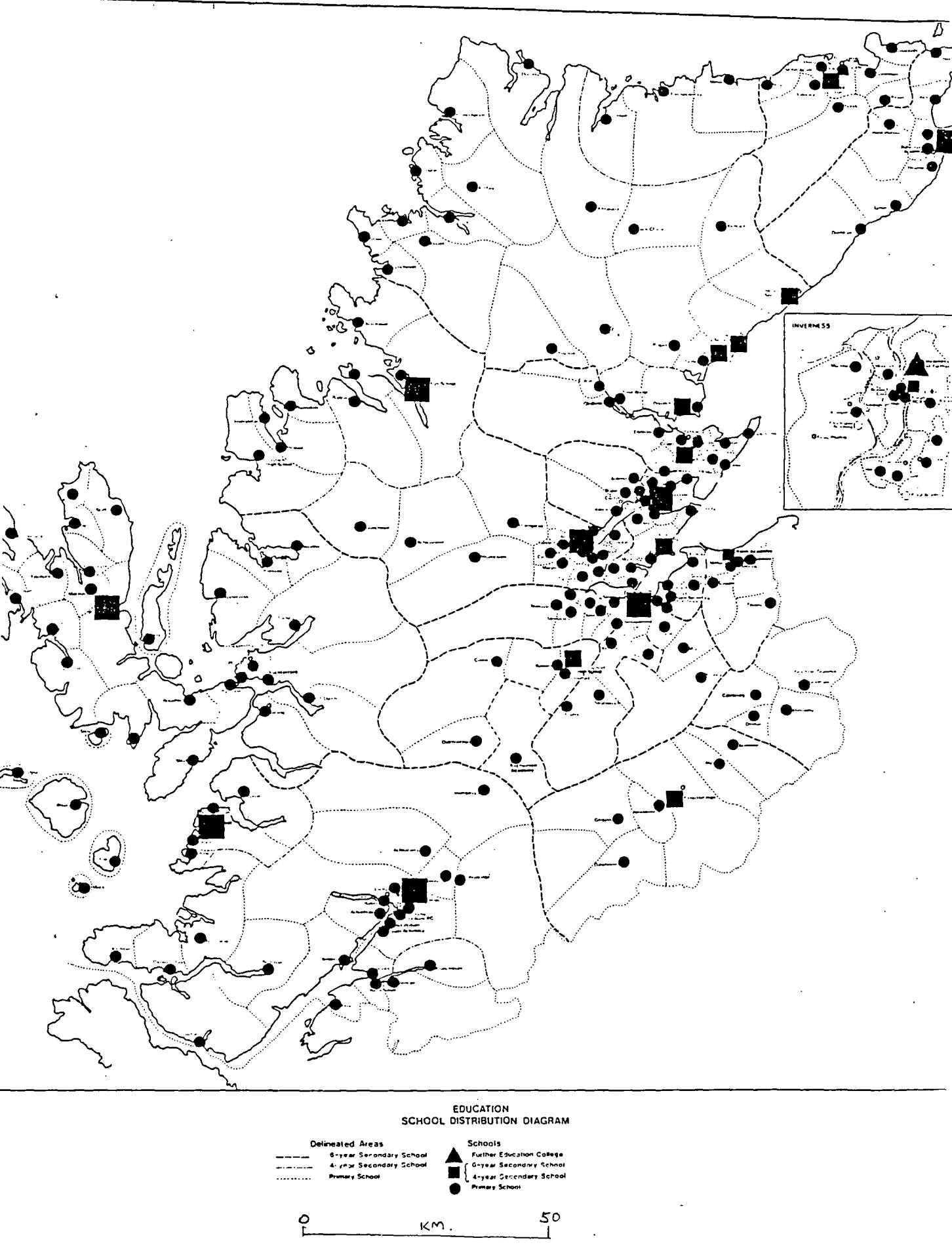
recently, the Highland Regional Structure Plan 1990 (Policy P79 b) commits the Regional Council to "press for closer integration of public transport services". (19) Figure 8.3 shows the distribution of schools in Highland Region and the catchment areas which they served at 1992/93. A complex network of school transport routes links each school with its surrounding hinterland.

8.9.4 Section 32 of the Transport Act 1980 made possible the use of all school vehicles by fare-paying passengers with the agreement of the local education authority. Section 32(11)(a) of the Transport Act 1980 states specifically that:

> A Local Education Authority may
> (a) Use a school bus when it is being used to provide free school transport to carry as fare paying passengers persons other than those for whom the free school transport is provided.

This provision of the Act was subsequently supplemented by S46 of the Public Passenger Vehicles Act 1981.

8.9.5 Thus, the entire network of school transport services is potentially available for use by the whole community, thus adding a possible completely new dimension to the public transport network of the country. These school buses could be used, where spare capacity exists on the vehicle, either to act as feeder services to bring passengers down from the remoter rural settlements to connect with the scheduled services or to provide a basic minimum service for isolated communities which would otherwise have no public transport (20).



Source: Highland Regional Council 1993

FIGURE 8.3 HIGHLAND REGION:DISTRIBUTION OF SCHOOLS AND THEIR CATCHMENT AREAS.

8.9.6 However, it should be recognised that there are some problems associated with the use of the school vehicles by fare-paying passengers. These may be summarised as follows.

1. Lack of spare capacity. Although the vehicle may have spare capacity along certain sections of route it may be full by the time it reaches the school. However, it should be possible for the public to use the vehicle over that section of route where seats are available in order, for example, to reach the main road where connections can be made with the regular bus service.

2. School transport provides a specialised service geared to meet the changing travel requirements of schoolchildren. It must be flexible in order to take account of the changing distribution of schoolchildren and the opening and closing of schools. School transport can also be a sensitive political issue and the Regional Education Authority may be subjected to considerable pressure from parents and others to meet the personal transport needs of their children.

3. Routes tend to be long and devious and often do not follow the most direct road.

4. The terminus of the service, the local secondary school, may be located on the periphery of the urban area some distance from the town centre, with no extensions to the town centre.

5. Although the timing of school services enables them to provide a daily journey to work facility the return journey is generally too early for returning

commuters and allows too long a waiting time in the local shopping centre for returning shoppers.

6. School transport services operate only during school terms and are not generally available during the school holidays.

8.9.7 Nevertheless, despite the limitations listed above, the school bus can provide a basic minimum service which might not otherwise be available to the rural community. It has the following distinct advantages:

1. The use of school transport services by fare paying passengers can be achieved at little additional cost to the Regional Council in that it is required to provide a transport service for eligible school children residing beyond the statutory minimum distance from school, regardless of whether the school vehicle is also used by the travelling public or not.

2. The school transport service may be regarded as a standby facility which can be made available, for example, for weekly trips into the local market town, in areas with a high level of car ownership where there is little or no demand for a daily public transport facility.

3. Although school buses operate only during the morning and evening peak periods they can be used in one direction only, the fare-paying passengers making their own arrangements to return home by private transport.

4. School transport services can be combined with postbus services to provide two return journeys daily into the local market town (see Chapter 5).

5. Operators of school vehicles as public service vehicles have the financial incentive of being eligible to claim fuel duty rebate.

6. Administrative costs for the operator can be reduced to a minimum by allowing him to retain any fares paid by adults (21).

7. The pattern of commuting in rural areas is often complex and by no means always a clearly defined centripetal-centrifugal movement of workers into and out of the urban centre. There can be movement of agricultural workers between farms, of forestry workers from villages to isolated commercial woodland or of hotel workers and domestic staff to and from hotels or houses in remote locations. Thus, the school bus can be used by these commuters over a section of its route and can provide a valuable standby facility.

8.9.8 As stated in S32 of the Transport Act 1980, the use of school vehicles by fare-paying passengers is at the discretion of the Regional education authority who will, no doubt, ensure that the following conditions are met.

1. That the route is one where no regular bus service operates at the same time.

2. That priority is given at all times to the conveyance of school children and that no alteration of route, pick-up points or timing be made unless this is required for school purposes.

3. That there are spare seats on the school vehicle.

4. That the Education Committee is satisfied that the safety of school children is adequately covered.

5. That in come cases children would be prepared to sit three-to-two seats in order to make additional space available for adults.

8.9.9 However, even when these conditions are fulfilled there may be some school services which would have potential for use by fare paying adult passengers.

8.10 **CONCLUSIONS REGARDING THE USE OF SCHOOL VEHICLES BY FARE-PAYING PASSENGERS**

8.10.1 There are currently (1992/93) 44 examples of school services in the Highland Region and 26 in the Borders Region which are available for use by fare paying passengers (see Tables 8.7 and 8.8). The number and distribution of these school services are constantly changing, with the changing pattern of distribution of schoolchildren eligible for free school transport, and opening and closure of schools. The centralisation of education in larger town schools has inevitably increased the demand for transport services (bus, taxi, minibus, etc) to convey children from scattered rural residences to the central town school. Invariably there is often spare capacity in the school vehicle (even when this is available for only part of the route). Logically, this spare capacity should be available for use by adult fare-paying passengers.

TABLE 8.7

HIGHLAND REGION - SCHOOL SERVICES AVAILABLE FOR USE BY FARE PAYING PASSENGERS 1992 - 93

(School Contract Journeys)

Education Office Division	Route	Route (contd)
INVERNESS (3 Services)	Storneferry - Auchtertyre Primary Lochside - Auchtertyre Primary Kyle - Plodeton High	
LOCHABER (6 Services)	Durar - Kinlockleven Secondary Lochailort - Mellaig High Acharacle - Lochaber High	Kinlochleven - Lochaber High Roy Bridge - Lochaber High Invergarry - Lochaber High
CAITHNESS (12 Services)	Berriedale - Wick High John O'Groats - Wick High Gelshfield / Watton - Wick High Bibster - Wick High Hastigrow - Thurso High East Mey - Thurso High	Oldhall - Thurso High Banniskirk - Thurso High Bettyhill - Thurso High Upper Dounreay - Thurso High Banniskirk - Halkirk Primary Scrabater - Pennyland Primary
SUTHERLAND (5 Services)	Helmsdale - Golspie High Brora - Golspie High Lairg - Golspie High	Bonar Bridge - Dornoch Acadamy Golspie - Kinlochlervie
ROSS & CROMARTY (18 Services)	Lochinver - Ullapool High Achiltibaie - Ullapool High Delny - Invergordon Academy Kildary - Invergordon Academy Barbaraville - Milton Primary Ballintraid - Park Primary Foulis - Alness Academy Milton - Tain Academy Geanis - Tain Academy	Balintore - Tain Academy Cadboll - Tain Academy Bladestand - Avoch Primary Fortrose - to Avoch Primary North Kessock - Fortrose Academy Avoch - Fortrose Academy Achonalt - Dingwall Academy Culbokie - Dingwall Academy Conon Bridge - Dingwall Academy

TOTAL - 44 SERVICES

Source: Author's Survey of Education Divisions of Highland Regional Council

TABLE 8.8

BORDERS REGION - SCHOOL SERVICES AVAILABLE FOR USE BY FARE-PAYING PASSENGERS 1992 - 93

(School Contract Journeys)

Route	Route (contd)
Auchercrow - Eyemouth	Abbey St. Bathens - Duns
Longformacus - Duns	Cranshows - Duns
Hassington - Duns	Eccles - Swinton - Duns
Morebattle - Kelso	Roxburgh - Kelso
Edgerston - Jedburgh	Hindhope - Oxnam - Jedburgh
Bonchester Bridge - Jedburgh	Bonchester Bridge - Hawick
Newcastleton - Hawick	Teviothead - Hawick
Craik - Roberton - Hawick	Longnewton - Ancrun - Jedburgh
Lilliesleaf - Selkirk	Selkirk - St. Boswells - Earlston
Westrutler - Lauder - Earlston	Longshaw - Melrose - Earlston
Ettrick - Ettrickbridge	Innerleithen - Yarrow - Selkirk
Tweedsmuir - Broughton	Peebles - Selkirk - Hawick
Ettrick Bridge - Selkirk	Innerleithen - Traquair - Peebles
	TOTAL 26 Services

Source: Borders Regional Council

8.10.2 In the Borders Region over 12% of primary school pupils and 37% of high school pupils qualified for free transport in 1994 thus necessitating the provision of a comprehensive and extensive network of school bus services (22). Some 4,000 scholars were carried by free school transport in 1994.

8.10.3 The advantages and disadvantages of using school contract vehicles by fare-paying passengers, as yet another form of unconventional public transport, has been fully discussed above. It seems that the mobility of the rural population of both the Highland and Borders Region has been enhanced at little additional cost to the Regional Council. Many other Regional Councils and Shire Counties in England and Wales, especially Northumberland where some 59 contract services were operated in 1990 and were available for use by fare-paying passengers, have realised the potential for developing this mode of transport as a supplementary form of unconventional public transport in remoter rural areas where there is no regular bus service (23).

8.10.4 Thus, school transport has a key role to play in sustaining the rural public transport network. In the Borders Region over 90% of local service buses are engaged in carrying schoolchildren or college students during peak periods. In fact, many local bus services can only be maintained because it is possible to use school buses to provide services at marginal costs between school duties (24).

8.11 GENERAL CONCLUSIONS

8.11.1 Thus, unconventional public transport in the Highland and Borders Regions performs a very positive role as a supplementary service additional

to the network of conventional bus services. It also provides (in the case of voluntary social car schemes) an emergency service meeting the needs of the elderly and disabled section of the rural population. This will provide a standby public transport facility for many of the rural population at little or no additional cost to the Regional Council. Thus, the Highland and Borders Regions can be used as a case study to illustrate the role of unconventional public transport in rural Scotland and to highlight in more detail the opportunities and the geographical problems which would result from the further expansion of this mode of public passenger transport in the aftermath of the Transport Act 1985.

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CHAPTER NINE

THE POTENTIAL ROLE OF OTHER UNCONVENTIONAL MODES OF PUBLIC TRANSPORT IN RURAL SCOTLAND

9.1 INTRODUCTION

9.1.1 There are several other examples of unconventional modes of public passenger transport which have not yet been fully developed in rural Scotland. The potential for the more widespread operation of these modes would seem to be considerable, given the political support of the Regional Councils concerned and the availability of finance from local or from central government. Rural Scotland with its dispersed settlement pattern, low population density and its remoteness from major centres of population provides an ideal testing ground for experimental schemes. Generally high levels of car ownership and an inadequate network of conventional bus services provide the opportunity for experimentation and innovation. Examples of unconventional public transport modes are discussed below.

9.2 DIAL-A-RIDE SERVICES

9.2.1 The basic principle behind the dial-a-ride service is that it operates over a clearly defined route, but allowing deviation only on days when it is required, depending on telephone bookings from potential passengers (1). There are currently (1992/93) 13 supported dial-a-ride schemes in Scotland, mainly concentrated in Grampian Region.

9.2.2 The advantages of a dial-a-ride service for the bus user are as follows.

1. The service operates practically door-to-door, matching the convenience of the private car.

2. It operates only when required, unlike the scheduled, conventional bus service which may run empty on some journeys, thus avoiding dead mileage.

3. The cost of subsidy from the Regional Council is generally lower than that for conventional bus services (£10 per day is typical) and is only payable on days when the service is actually used.

4. Operators may use any type of vehicle to run the service (eg, minibus, car, midi-bus, standard bus) and can thus adjust the seating capacity to meet passenger demand on the day of operation.

5. Grants may be available from the Rural Transport Development Fund towards meeting operating costs.

9.2.3 The pattern of distribution of dial-a-ride services in Scotland has already been fully described in Chapter 3. However, this chapter provides some further details of the principles of the schemes and suggests their possible application to other parts of rural Scotland. The potential for the operation of dial-a-ride and the successes and failures of such services have been fully described by several transport analysts.

9.2.4 Grimmer (2) describes several dial-a-ride systems in Great Britain and comments on their varying degrees of success and failure. Hoey (3) considers the matter in greater detail and notes that dial-a-ride services have now become widespread in Western Europe as demand-responsive, small bus transport systems. A comparison of several systems suggests that a well marketed fixed route bus system can be far more cost effective than dial-a-ride in low

density areas. He considers that the concept of demand-responsive public transport should be broadened to include well planned, fixed route transit. He concludes that dial-a-ride appears to have greater value for special needs groups (eg, the elderly or disabled) and at times when fixed route transit would be uneconomical. He concludes that better integration between dial-a-ride and fixed route services is essential in order to facilitate transfer between the two modes of public transport.

9.2.5 In October 1990 Grampian Regional Council introduced a Dial-a-Ride service for the elderly and disabled (4). The service operates in Kincardine and Deeside District making use of social work department minibuses when they are not required for that department's needs. An extensive network of four services is provided covering most of the rural area and the local centres of Banchory and Stonehaven. The vehicles can be made accessible to wheelchair users with flexible routes to provide door-to-door services on request. The service is designed to cater primarily for those with a mobility handicap, but is also available for use by the travelling public and hence lies within the terms of reference of this thesis. The service is currently operating on an experimental basis with continuation and extension to other areas of the Region, dependent upon later review.

9.2.6 Strathclyde Region also operates four Dial-a-Bus services (5). The services are popular and experienced a 11% increase in patronage in 1991/92. As a result of the improved utilisation of the service the cost per passenger journey fell by 10% to £3.24. This represents by far the most cost effective dial-a-ride service of its kind in

Britain. Some service adjustments were made in 1991/92 to ensure the more effective use of the services. In spite of these improvements, the increasing popularity of the dial-a-bus is straining the financial resources of the Regional Council. A recent survey of users identified the main problems as congestion on the telephone booking lines and the buses being fully booked by the time a call gets through. The unfortunate result is that it has become necessary to introduce trip quotas on some routes to ensure that all registered users have access to the service. However, it is clear that additional vehicles are required if the service is to meet the demands of the immobile elderly population. As a result, the Regional Council has made a bid for additional funding for the service.

9.2.7 Fife Regional Council has also developed a dial-a-ride service which is available for use by the general public as well as for the mobility handicapped (6). The service is especially geared to the needs of the individual (rather than groups or organisations) and operates on a semi-scheduled basis providing a service mainly between home and town centre. Each journey serves a specified residential area/zone and will provide pick-up at the door of the user, but with a specified town centre destination. The user may be accompanied by a companion and the service is provided free of charge. The scheme started with one vehicle in 1986 and currently (1992/93) uses four vehicles each day. Patronage now exceeds 400 per week reflecting the increasing popularity of the service. Patronage of the service fluctuates reflecting variable demand. However, there has been an overall rise in usage during the period 1987/88 to 1991/92 (see also Chapter 3).

9.2.8 In England and Wales dial-a-ride schemes are most widely developed in Hampshire where there are currently 18 schemes (7). They provide a door-to-door service using specially adapted vehicles for people who find it difficult or impossible to use conventional public transport because of a disability. However, these services are also available to the non-registered disabled passenger. In Hampshire services vary in frequency from one day per week, run by volunteers, to seven days a week employing paid staff. Hampshire County Council will spend £355,000 in providing these services in 1993/94 and this amount will be matched by district council contributions.

9.2.9 The most convenient source of detailed information on the operational characteristics and performance of dial-a-ride schemes is contained in Oxley (8). The operating environments of the dial-a-ride services vary, but they all share the basic characteristic of flexibility and the ability to provide a door-to-door service which can match the convenience of the private car. The studies discussed by Oxley contrast the flexibility of such services with the rigidity and inflexibility of the conventional bus service with its fixed route, fixed stopping points and rigid timetable which operates in many cases regardless of seasonal, daily and hourly changes in demand for the service. The dial-a-ride service is, therefore, adapted to cope with the changing distribution of passengers, with peak and off-peak demand, and does not operate on days or at times when there are unlikely to be any passengers.

9.2.10 In the opinion of the writer there is considerable scope for the development of dial-a-ride services in

both the Highland and Borders Region where they are, as yet unrepresented. Indeed, dial-a-ride could usefully be developed in many other rural Regions of Scotland at a lower cost than a subsidised, tendered, conventional bus service.

9.3 THE POTENTIAL FOR THE DEVELOPMENT OF COURIER TYPE SERVICES

9.3.1 The use of a multi-functional vehicle to carry both freight and passengers is not a new concept. The carriers cart services of the mid 19th century which acted as feeder services to the railway stations adopted the same principle. On the continent of Europe the Österreiches Bundespost and the Deutsche Bundespost vehicles have been used to carry freight (mainly mail) and passengers in the same vehicle, the receipts from the former helping to cover the cost of operating the service for the benefit of the latter, since the 1920s. The Ministry of Transport publication of 1956 "Village Bus" also recommended the development of locally organised bus services adapted to carry both passengers and freight (9). Likewise the later Ministry of Transport "Report on Rural Bus Services" (the Jack Report) of 1961 (Para 131) also investigated the carrying of goods in passenger vehicles (10).

9.3.2 The Borders Courier Service, introduced in the Borders Region in 1979 and described in Chapter 7, is a further example of the principle of carrying passengers and freight in the same vehicle, the revenue earned from the carriage of freight being used to cross-subsidise any losses incurred in operating the passenger service. The main freight handled comprises essential medical supplies and

blood samples which are transferred between surgeries, health centres, cottage hospitals and the main Regional hospitals and blood transfusion centres. The organisation of the service involved close co-operation between different departments of the Borders Health Board to combine their goods transport system into one network, while at the same time providing a bus service for a number of hitherto isolated areas (11).

9.4 APPLICATION OF A COURIER-TYPE SERVICE TO OTHER SCOTTISH REGIONS

9.4.1 The application of a Border Courier-type service to other Scottish Regions, including the Highland Region, would seem to have a number of advantages which may, in the opinion of the writer, be summarised as follows.

- The physical geography of the Highland Region and its spatially dispersed settlement pattern mean that where potential demand for public transport does exist it is dispersed over wide areas and there are few significant concentrations of demand, thus making it difficult to operate public transport profitably. A flexible form of transport, such as the Border Courier-type service is thus desirable in order to serve this dispersed rural population where demand for public transport is generally limited to the need to make a weekly shopping trip into the local market centre.

- The use of <u>paid</u> (rather than volunteer) drivers would seem to be sensible in order to ensure the continuity and reliability of the service.

- The service is obviously unsuitable for the daily journey to work or to school, but it is ideal for residents requiring a regular, if infrequent, service into the local market centre for occasional shipping trips during the off-peak period.

- A Border Courier type service has the advantage over a school vehicle in that it operates outside of school term, and over the postbus service in that it is more direct and allows a more convenient, shorter period for shopping in the local market centre.

- There should be considerable scope for using the vehicle for private hire when it is not required for the movement of goods.

9.4.2 Several of the departments of the Highland Regional Council and the District Councils already operate courier services for the movement of letters, files and parcels between their various offices. All of these services are operated by vehicles owned by the Regional or District council. Examples include:

- courier services operating between Regional and District headquarters for the despatch of mail;

- the delivery service run by the Regional Library Service to connect rural branch libraries with their headquarters at Inverness (see Figure 9.1);

- the school meals service which connects dispersed schools with their central kitchens.

9.4.3 A further option might be to involve the use of vehicles owned and operated by the Divisional Health Authorities. It is noted that the main function of

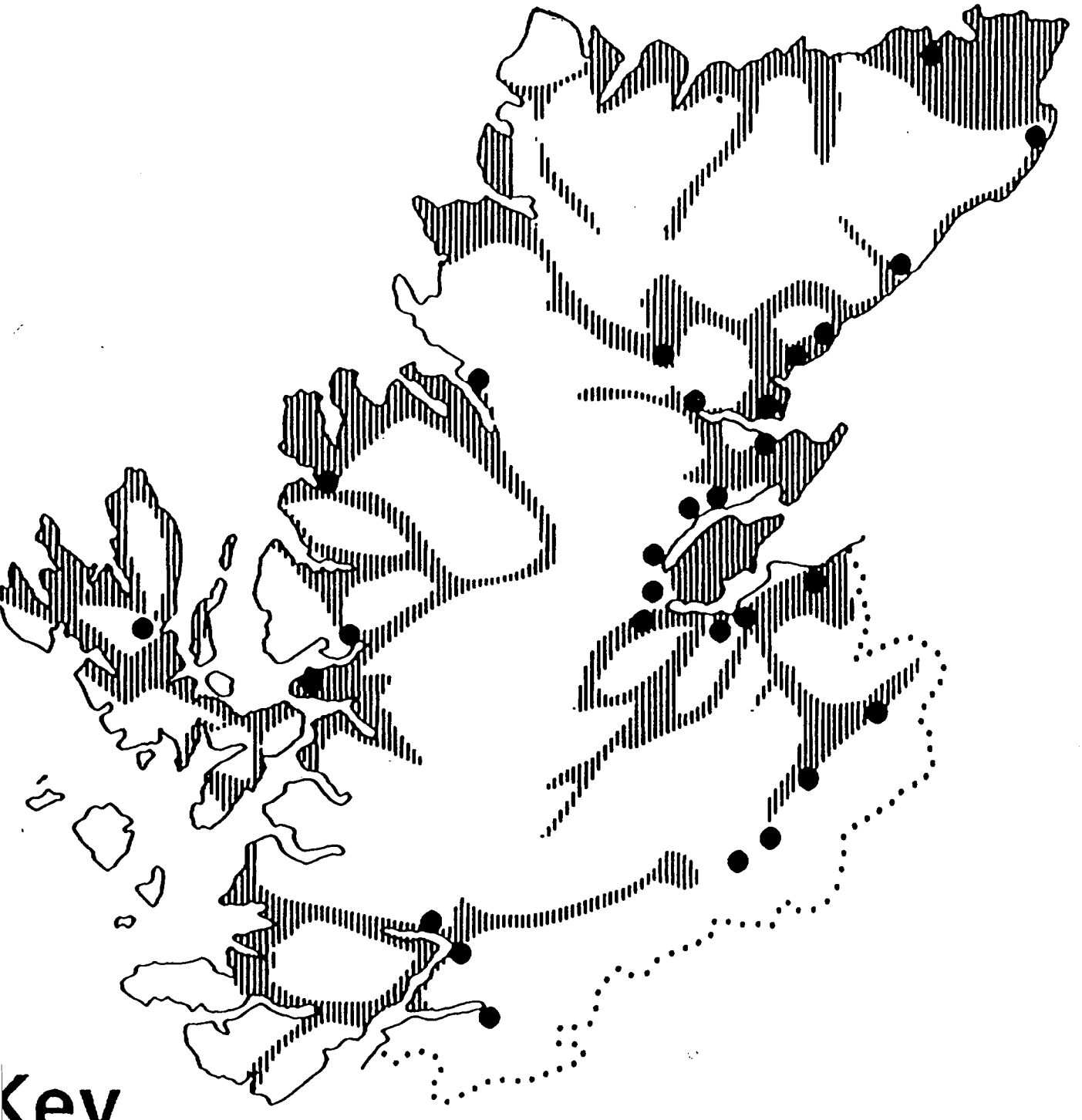

FIGURE 9.1. HIGHLAND REGION: DISTRIBUTION OF LIBRARIES 1993.

the Border Courier service is to provide a means of transport for the movement of medical supplies in the Borders Region. However, the involvement of the Divisional Health Authorities in the development of a courier service for use by fare-paying passengers, as well as freight, has a number of problems if applied to the Highland and other predominantly rural Regions. These may be summarised as follows:

1. The vehicles used are not owned by the Regional Council and their operation would be dependent upon the goodwill and co-operation of the Divisional Health Authorities.

2. DHA vehicles provide a very specialised service for the movement of medical supplies and the use of their vehicles by passengers could involve delays in the delivery of these urgently needed items.

3. DHA vehicles tend to operate between major hospitals located in the towns. They, therefore, operate along well established inter-urban routes, already served by conventional bus services.

4. There could be security problems in that some DHA vehicles carry valuable items like staff wages and drugs which it would be undesirable to carry in a passenger vehicle. It is, therefore, suggested that the disadvantages of the involvement of the Divisional Health Authority would considerably outweigh the advantages and that, although appropriate in the Borders Region, it would not be applicable in the Highland and other predominantly rural Regions of Scotland, where relationships between the Regional Council and the Divisional Health Authority may be less close.

9.4.4 To confine the service to vehicles owned or controlled by the Regional Council, ie Regional Council, District Council, Library Service and Schools meals service vehicles only would have the following advantages.

1. It would be under the firm control of the Regional (or other) council who would own and operate the vehicle and hence would not be dependent upon the transport requirements of outside bodies such as the Divisional Health Authority.

2. Its prime aim would be to serve the needs of the Regional or, where appropriate, district councils in the transportation of mail, parcels and files between district and Regional council offices, of library materials and books between branch libraries and the library headquarters and of school meals between the centrally located kitchens and dispersed rural schools. The movement of passengers would be an additional, supplementary activity which would not interfere with the established timetable of the courier service. However, the adaptation of the vehicle to provide up to 8 seats as well as space for freight would enable the service to provide an additional public transport facility which would supplement, rather than compete with scheduled bus services enabling rural residents to visit local urban centres for occasional shopping trips. In some cases it would operate alongside the regular service and fill in gaps in its timetable. It is unlikely that the proposed reorganisation of local government in Scotland in 1995/96 and the creation of unitary authorities would radically affect this pattern of use of courier services for the carriage of passengers.

3. Apart from the cost of providing a suitable vehicle containing passenger seats as well as space for freight, the service would operate at no additional cost to the Regional Council in that it would be an extension of its existing parcels and school meals service and library service.

9.5 CONCLUSIONS

9.5.1 There would thus seem to be scope for the development of a courier-type service in the Highland and some other rural Regions by making full use of Regional Council vehicles which already travel along regular routes to set timetables. The substitution of vehicles adapted to carry both passengers and freight would thus help to create a valuable supplementary public transport facility at little additional cost to the Regional Council. Similar schemes could, no doubt, be developed in other predominantly rural Scottish Regions.

9.5.2 The above idea of utilising Regional Council and other local authority vehicles as the basis for the establishment of a courier-type service in rural Scotland does not, as yet, seem to have been developed by other transport analysts, although Lugton (12) discusses the potential for the use of dual-purpose vehicles in rural areas in his paper of 1980. The basic principles described above were investigated by the writer as an employee of Cumbria County Council and found to be feasible (13). The potential for the development of courier services in predominantly rural areas of Scotland would seem to be considerable and, given the political will, could be adopted immediately and at little additional cost (other than the conversion of the vehicle to carry passengers as well as parcels).

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CHAPTER TEN

UNCONVENTIONAL PUBLIC TRANSPORT SINCE THE 1985 TRANSPORT ACT IN RURAL SCOTLAND

10.1 INTRODUCTION

10.1.1 The objective of the present chapter is to try to assess the impact of the Transport Act 1985, one of the most far-reaching pieces of transport legislation in recent years, upon this pattern and to illustrate this impact with special reference to the Highlands and Borders Regions. One of the problems encountered in undertaking this task is that of identifying the Act as a prime cause of any changes which may have occurred, since unconventional public transport services which operated prior to the Act may have continued regardless of any effect which it may have had. Thus the Act may not have radically altered Regional Councils' policies towards innovatory public transport which have persisted despite the Act. Nevertheless, an attempt has been made to try to assess whether the Act has had any pronounced effect on the pattern of unconventional public transport operating in the Regions of Scotland and to illustrate this impact with special reference to the Highland and Borders Regions.

10.2 THE IMPACT OF THE 1985 TRANSPORT ACT

10.2.1 There are two ways in which the impact of the Act can be measured in more detail - firstly by considering the opinions of the Public Transport Officers of the Regional Councils concerned and secondly by assessing the number and distribution of grants awarded from the Rural Transport Development Fund by the Scottish Office in Scotland under the terms of Section 108 of the Transport Act 1985.

These grants are termed Rural Transport Innovation Grants (RTIG) in Scotland.

10.2.2 In July 1993 questionnaires were sent to all the Public Transport Officers in mainland Scotland to ascertain their views on the effect of the Transport Act 1985 on the pattern of distribution and role of unconventional public transport in their Regions. The results of the survey are tabulated in Table 10.1. The opinions of the Public Transport Officers were categorised in the following manner:

1. no direct effect;
2. very little direct effect;
3. some direct effect;
4. considerable direct effect.

The results of this survey have been tabulated as follows.

TABLE 10.1
IMPACT OF THE 1985 TRANSPORT ACT ON UNCONVENTIONAL PUBLIC TRANSPORT IN THE REGIONS OF MAINLAND SCOTLAND

Region	No Direct Impact	Little Direct Impact	Some Direct Impact	Considerable Direct Impact
Borders	*			
Central		*		
Dumfries & Galloway	*			
Fife		*		
Grampian	*			
Highland		*		
Lothian			*	
Strathclyde (rural)			*	
Tayside				*
TOTAL MAINLAND SCOTLAND	3	3	2	1

Source: Author's Survey of Regional Councils

10.2.3 Table 10.1 thus shows that the effect of the 1985 Transport Act, in the opinion of the Public Transport Officers concerned, has not been dramatic in most Regions of mainland Scotland. In only one Region (Tayside) was the Act reported to have had a considerable direct impact on the number and role of unconventional public transport services. In two Regions it was thought to have had some effect, but in six Regions its effects were assumed to be of little significance, despite the fact that these Regions were predominantly rural and already had a well established system of innovatory public transport services. In such cases the explanation was generally that policies for the development of unconventional public transport which had prevailed for a number of years would continue despite the provisions of the Transport Act 1985. Thus the Act was seen as generally irrelevant to their continued operation. The important role which unconventional public transport already played as an emergency and supplementary service was well recognised in such Regions which would continue to pursue existing policies despite the passing the Act. Further expansion of innovatory services would have taken place in any case.

10.3 RURAL TRANSPORT INNOVATION GRANTS (RTIG) AS AN INDICATOR

10.3.1 Section 108 of the Transport Act 1985 empowers the Secretary of State to make grants for improvements to an existing service if it appears to involve an innovative approach. These grants are administered in England by the Rural Development Commission where they are termed Rural Transport Development Fund grants. However, in Scotland they are known as Rural Transport Innovation Grants and are

administered directly by the Scottish Office (Industry Department) in the notable absence of a direct equivalent to the Rural Development Commission.

10.3.2 Table 10.2 has been prepared from statistics provided by the Scottish Office to summarise the distribution of these Innovation Grants in Scotland since their institution in April 1986. The Scottish Office has power to give grants of up to 50% of the setting up costs and initial running expenses for new public transport services that will provide worthwhile benefits for rural communities in Scotland with populations of less than 10,000.

10.3.3 The appointment of Rural Transport Advisers (or Brokers), mainly funded by the Scottish Office is another consequence of the Act. Such advisors have, so far, been appointed in Tayside, Borders (since 1991) and Central Regions. They have generally been charged with the task, in association with the Regional council concerned, of developing innovatory public transport and advising on schemes to fill in gaps in the network of conventional bus and rail services. Their duties have also included encouraging the development of new transport projects and ensuring that the use of the Council's own vehicle resource is maximised. (1) In the Borders Region the Council regards the provision of a comprehensive bus timetable as an essential service to travellers so that they may be aware of the full range of travel opportunities available to them.

10.3.4 Table 10.2 thus gives some indication of the take-up of grants to develop innovatory public transport in the different Regions and reflects to some extent, the impact of the Transport Act 1985 which has help-

TABLE 10.2

SCOTLAND: SUCCESSFUL RURAL TRANSPORT INNOVATION GRANT APPLICATIONS BY REGION. 1985 - 93
ANNUAL VALUE & NUMBER OF GRANTS (26)

REGIONAL & ISLAND COUNCILS	1986	1987	1988	1989	1990	1991	1992	1993
Borders	£2,000(1)	NIL	NIL	NIL	£8,764(2)	NIL	NIL	NIL
Central	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Dumfries & Galloway	NIL	£32,330.50(4)	NIL	£4,800(1)	NIL	NIL	NIL	NIL
Fife	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Grampian	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Highland	NIL	NIL	£19,345(2)	£16,845(1)	NIL	£4,181(1)	£4,341(1)	NIL
Lothian	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Strathclyde	£12,250(1)	NIL	NIL	£9,625(1)	NIL	NIL	NIL	NIL
Tayside	£18,750(1)	NIL	NIL	£5,560(1)	NIL	£246(1)	NIL	£4,800(1)
Orkney	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Western Ilses	£2,119.50(1)	NIL	NIL	£4,768(1)	NIL	NIL	NIL	£2,800(1)
Shetland	NIL	NIL	NIL	NIL	£9,750(2)	NIL	£7,781.50(2)	NIL
TOTALS	£35,119.50(4)	£32,330.50(4)	£19,345(2)	£41,598(5)	£18,514(4)	£4,427(2)	£12.122.50(3)	£7,600(2)

Source: Scottish Office (Industry Department)

ed to make such schemes possible. It is noted that during the period 1986-93 a total of 26 schemes were given financial support from Rural Transport Innovation Grants (RTIG) to a total value of £171,045.

10.3.5 It is noted that the take-up of RTIG grants has been slowing down in recent years with only three applications in 1992 and two applications in 1993. Moreover, five Regions have never availed themselves of the opportunity to use them as a means of developing innovatory public transport. Successful bids, on the other hand, have been received from Borders (3 schemes), Dumfries and Galloway (5), Highland (5), Strathclyde (2), Tayside (4), Western Isles (3) and Shetland (4).

10.3.6 Applicants for RTIG also need to show that their proposals have strong local support and that they offer benefits that are unlikely to be provided without grant assistance. The distribution of grants can thus be used as a key indicator of the relative impact of the Transport Act 1985 throughout Regional Councils of Scotland. In general, this facility has been well used by seven of the twelve Scottish Regions. It has, however, been neglected in five Regions (Central, Fife, Grampian, Lothian and Orkney) where the take-up of RTIG has been slow.

10.4 FINANCIAL IMPLICATIONS OF THE ACT

10.4.1 The White Paper "Buses" and the subsequent Transport Act 1985 recognised the generally unprofitable nature of most rural bus services and the need to preserve minimum levels of public transport provision. (2) The Act, therefore, introduced a system of competitive tendering which enabled

operators to make bids for subsidy of unprofitable, but socially necessary services. This was achieved by enabling local authorities to subsidise unremunerative, but socially desirable services and to claim grant-aid direct from central government. (3) The latter took two forms:

1. Fuel Duty Grant. This provided a fuel tax rebate to operators of registered services from central government. Although this system dated from the Transport Act 1968, it continued to survive even after the implementation of the Transport Act 1985. (4)

2. Transitional Rural Bus Grant. This was offered by central government to enable operators to maintain continuity of registered services in rural areas under the terms of S109 of the Transport Act 1985. It was paid from a £20 million fund which was progressively reduced over a four year period. Operators of registered services outside centres of over 20,000 population, operating local services were eligible for the grant. This grant was eventually phased out in April 1990. (5) It met the entire cost of subsidising all 12 postbus services in the Borders Region between 1986 to 1989.

10.4.2 Thus the Transport Act 1985 made provision for the continued subsidy of socially necessary, but unprofitable rural bus services from Regional Councils through the process of competitive tendering and from central government via Transitional Rural Bus Grant and Fuel Duty Rebate. (6) When the net cost of operating unconventional public transport, for example postbus services, was less than £8,000 annually the "De Minimis"

proceedings apply and the operator is exempt from the tendering procedures of the Act.

10.4.3 Additionally, as described above, innovatory public transport may be eligible for a grant from the Rural Transport Development Fund which is paid by the Scottish Office from a £100,000 fund. This fund now amounts to £750,000 in England since July 1994. (7) Thus the Transport Act 1985 has introduced new sources of finance from central government in order to maintain innovatory public transport. (8)

10.4.4 Section 104 of the Act aims to encourage the provision of transport facilities for those with special needs who are unable to use ordinary public transport services. Under the terms of this section, Regional Councils may offer grants to operators and voluntary organisations towards the purchase or relevant modification of vehicles. Grants are, in general, restricted to 50% of costs with an upper ceiling of £1,000 for commercial ventures, eg taxis, but with no specified ceiling for voluntary organisations. (9) In some cases these modified vehicles are also available for use by the general travelling public and hence constitute public transport within the terms of reference of this thesis.

10.5 THE IMPACT OF THE 1985 TRANSPORT ACT IN THE HIGHLAND AND BORDERS REGIONS

(a) Conventional Public Transport

10.5.1 It will be convenient to first consider the Highland Region and then to proceed to compare this with the Borders Region.

A. Highland Region

10.5.2 The Transport Act 1985 brought about a fundamental change in the role of local authorities in relation to public transport provision. (10). Formerly under the provisions of Clause 151(1) of the Local Government (Scotland) Act 1973 it was the duty of Regional Councils in Scotland to develop policies which would promote the provision of a co-ordinated and efficient system of public passenger transport to meet the needs of the area.

10.5.3 This duty was abolished (with effect from 6 January 1986) by the Transport Act 1985. Under the provisions of Clause 63(2) of the Act it is now the duty of Regional Councils in Scotland to secure the provision of such public passenger transport services as the Council consider it appropriate to secure to meet any public transport requirements within their area "which would not in their view be met apart from any action taken by them for that purpose."

10.5.4 Bus services are the predominant mode of public passenger transport within the Highland Region. Under the provisions of the Transport Act 1985 bus operators are required to register details of those bus services they are willing to operate commercially (ie without a subsidy from the Regional Council(. Chapter 5,(Figures 5.2 and 5.3,) show the network of commercial and contract bus routes in the Highland Region at 1992/93.

10.5.5 In 1989 there were some 68 commercial services and 73 tendered (subsidised services) run by 19 operators. Thus the overall policy of the Regional Council has been to maintain the 1985 (pre de-

regulation) bus network as intact as possible with the minimum adjustment of routes.

10.5.6 It should be noted that the 1985 Transport Act led to a significant reduction in the level of subsidy awarded by the Regional Council to support a network of conventional bus services. Before de-regulation was introduced the public transport budget of the Highland Region was £1,191,738, compared with £1,057,625 after de-regulation, a saving to the council of £134,113 or 11%. Despite this the Regional Council reported that the changeover to the new system on 11 August 1986 went extremely smoothly (11). Table 5.2 listed bus contracts in the Highland Region at 1992/93. These are subsid ised services which are unremunerative, but supported financially by the Regional Council to maintain minimum levels of accessibility in the Region. The routes include some essential journeys to school as well as services which are needed to overcome the isolation of remote communities which might otherwise have no public transport links with market towns and larger urban shopping and service centres. In this way they will help to overcome rural deprivation caused by inaccessibility. Thus the shape of the bus network in the Highland Region has remained relatively unchanged, but with some modifications of frequency of service to meet changing passenger demand.

10.5.7 In summary, it is the council's policy to:

1. Avoid contracts for the provision of public transport services in appropriate cases where no operator is willing to provide the desirable level of service on a commercial basis.

2. Review existing contracts to ensure that these cater for changes in need, cancelling contracts no longer required and awarding new contracts, where appropriate.

3. Co-operate with the post office in optimising the use of postbuses throughout the Region.

10.5.8 In general, inter-urban bus services in the Moray Firth area are provided commercially, as are long distance services on main routes and town services in Inverness, Fort William, Wick and Thurso. The majority of tendered contract services which receive a subsidy from the Regional Council (listed in Table 5.2) are found in the more remote parts of the interior. Currently (1992/93) there are 53 contracted services held by 17 operators. (12)

10.5.9 This network of commercial and tendered conventional bus services continues to be supplemented by postbus services which are particularly useful in sparsely populated areas where the number of users is so small that no conventional bus service could survive, except by unreasonably heavy contract payments. The role of postbus services in the context of the public transport system of the Highland Region has been fully discussed in Chapter 7. In 1992/93 subsidy to postbus services amounted to £17,764. Figure 10.1 shows the network of postbus services immediately prior to the implementation of the Transport Act 1985 when there were 38 services. This compares with the more comprehensive network of 45 services which operated in 1992/93 which are described in Chapter 7 (Figure 7.1).

10.6 THE CONTRIBUTION OF RURAL TRANSPORT INNOVATION GRANTS

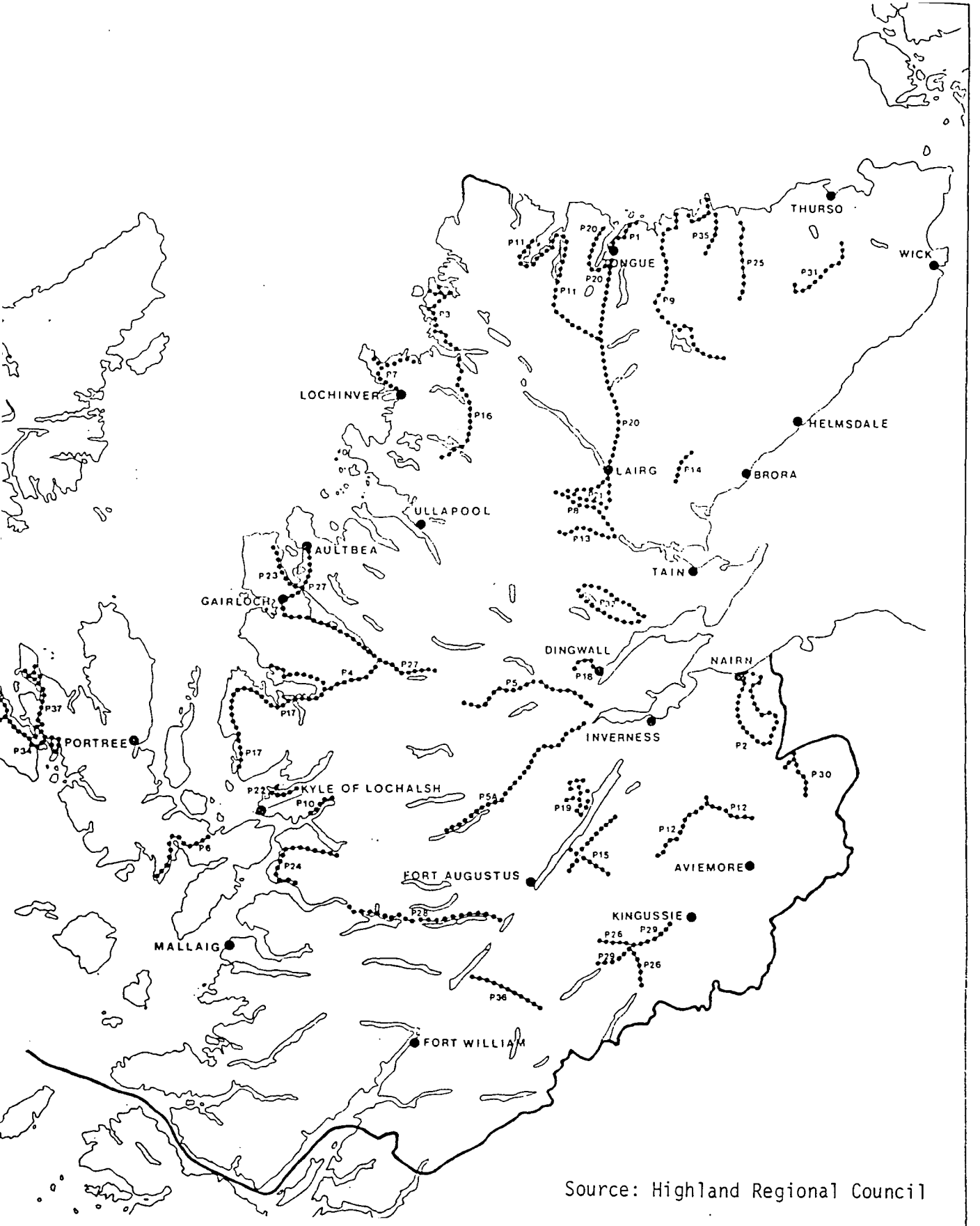


FIGURE 10.1 HIGHLAND REGION:POSTBUS SERVICES 1985.

10.6.1 As explained above, one of the instruments of transport policy in Scotland, introduced by the Transport Act, was the award of Rural Transport Innovation Grants (RTIG) to support innovative public transport. Highland Regional Council has not been slow to avail itself of the opportunity to use these funds to support experimental public transport schemes. The Council's successful bids for the award of these grants are listed in Table 10.3.

10.6.2 It is apparent from Table 10.3 that capital grants have been awarded towards the purchase of three postbuses in order to introduce new postbus services in isolated parts of the Region. In addition, two cases are noted of capital grants towards the purchase of a conventional bus in order to develop new rural bus services which, although socially necessary, would be grossly unprofitable and funds would not be available from any other source. The Highland Region has benefitted from a total of £44,712 in capital grants towards the development of innovatory public transport since de-regulation (see Table 10.2).

10.7 THE BORDERS REGION

10.7.1 In 1993 tendered bus miles in the Borders Region constituted 48% and commercial bus miles 52% of total bus miles operated within the Region. This compares with 39% and 60% respectively in 1986. Thus the proportion of tendered (subsidised) bus miles has increased since the implementation of the Transport Act 1985. In general, the bus network as retained its pre-1985 shape, but with some variations in frequency, especially in urban areas. The network of bus services in the Borders Region is thus becoming more and more dependent upon financial

TABLE 10.3

HIGHLAND REGION - AWARD OF RURAL TRANSPORT INNOVATION GRANT (R.T.I.G.)

Highland Regional Council

	Applicant	Type of Grant	Amount Granted
1.	Bus Operator Brora, Sutherland	Capital	£15,964

Capital Grant provided towards 50% of the purchase price of a bus for the provision of a new rural bus service between Golspie, Brora and Helmsdale on the East Coast of Sutherland. Grant paid May 1988.

2.	The Post Office Inverness	Capital	£3,381

Capital Grant was provided for 50% or purchase cost of a new post bus vehicle to establish a new post bus service to the Red Point and Melvaig District in Wester Ross. Grant paid October 1988.

3.	Bus Operator Isle of Skye	Capital	£16,845

Capital Grant provided for 50% of purchase cost of a new bus for use on a new service on the Isle of Skye. Grant paid February 1989.

4.	Post Office Inverness	Capital	£4,181

Capital Grant provided for 50% of purchase cost of a vehicle for use on a new post bus route between Ballachulish / Fort William / Glenetive. Grant paid during October 1991.

5.	Post Office Inverness	Capital	£4,341

Capital Grant provided for 50% of purchase costs of a new vehicle for use on a new post bus route between Fort William and Ardgour. Grant paid during November 1992.

support from the Regional Council. (13) In 1993, there were 41 contracted services compared with 40 in 1986. This figure includes the four Border Courier services.

10.7.2 During the period since 1986 the number of bus miles of all categories operated in the Borders Region rose from 3.20 million to 3.43 million in 1993, a rise of 7%. Most of this new bus mileage occurred in both urban and rural areas and was the result of the Regional Council's efforts to maintain minimum levels of service and a basic bus network in the Borders Region through the process of competitive tendering. The bus network of the Region has therefore been expanded since the Transport Act 1985 and frequencies improved in some cases, especially in urban areas where the market for public transport is concentrated.

TABLE 10.5

BORDERS REGION - AWARD OF RURAL TRANSPORT INNOVATION GRANT (R.T.I.G.)

Borders Regional Council

	Applicant	Type of Grant	Amount Granted
1.	Southdean (Hobkirk Community Council)	Capital	£2,000

The Community submitted an application for Grant towards purchase cost of a replacement vehicle for use on an existing service provided by the Commmunity Council from Bonchester Bridge and surrounding villages into Jedburgh and Hawick. Grant of £2,000 was paid during October 1986.

2.	Ettrick & Yarrow Community Council	Capital	£4,364

The Community applied for Grant towards the purchase cost of a replacement vehicle for use on an extended service between Ettrick Bridge, Yarrow and Selkirk. Grant of 50% or purchase costs was provided during April 1990 for the purchase of a one year old minibus.

3.	Borders Community Transport Group	Revenue	Up to £4,400

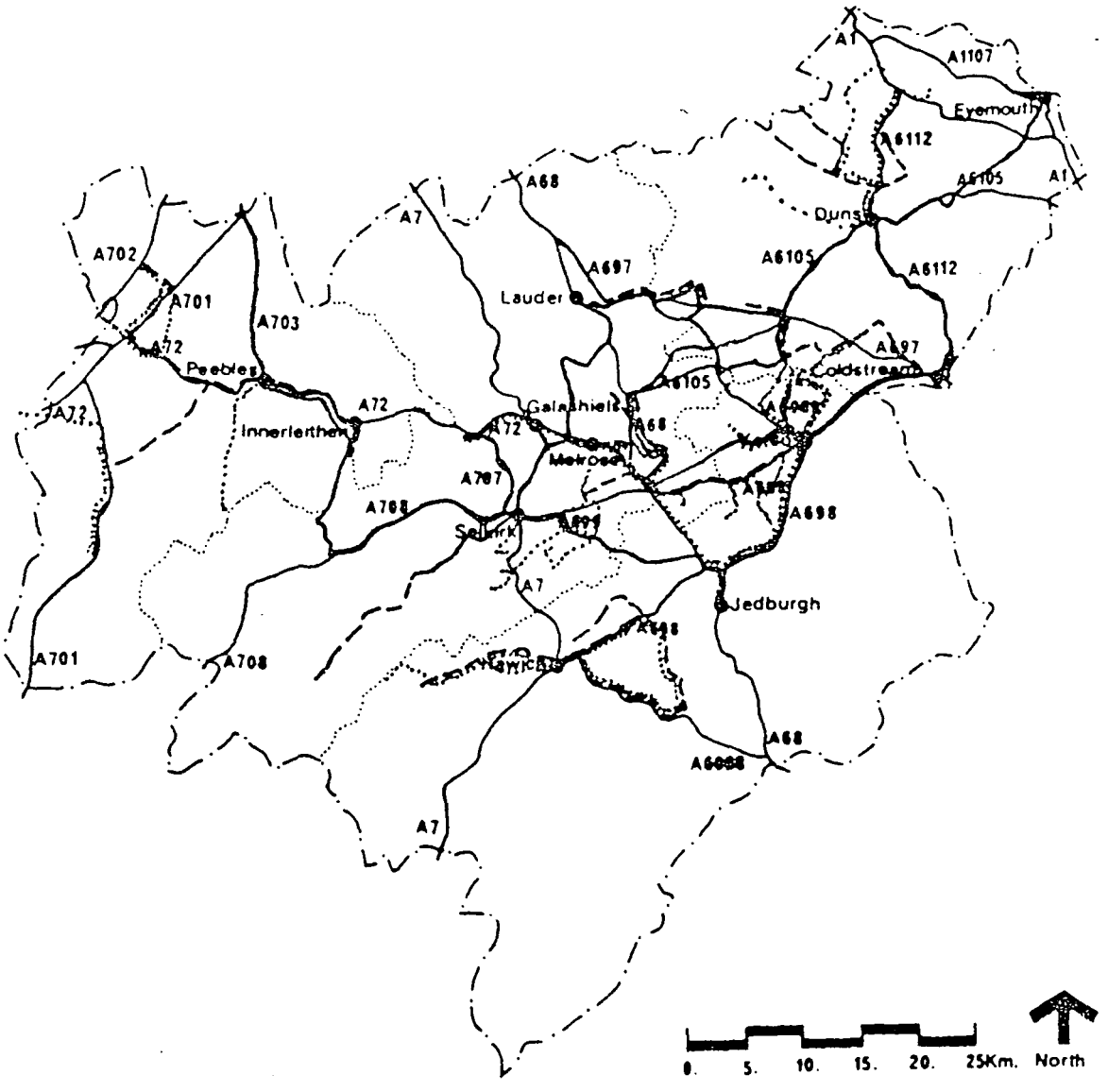
Revenue Grant of up to £4,400 for one year was provided in support of the Borders Community Transport Group's running costs.

10.7.3 The Regional Council continues to encourage and promote unconventional solutions to the region's transport problems where these appear to be cost effective following the implementation of the Transport Act 1985. (14) These unconventional services contribute to the provision of secondary transport to landward areas. By their nature, however, these innovative solutions tend to offer only a restricted level of service, often of an indirect nature and sometimes at times ill-suited to passenger travel demand because of their other functions and constraints. These services are, therefore, an extension of conventional services into areas where demand is very sparse. In many parts of the Borders Region more than one mode is available, providing complementary services. For example, many small settlements in the Borders Region now have access to both a licenced school bus service and a postbus and some may also be served by the Border Courier. Figures 10.2 and 10.3 shows the network of unconventional public transport services at the time of the implementation of the Transport Act 1985.

10.7.4 Unconventional services, developed prior to the Transport Act 1985 have continued to operate despite the Act. Table 10.4 summarises the number of unconventional schemes immediately prior to the Act compared with the present time (1992/93). It is evident that there has been very little change in the number and distribution of these innovative services over the 10 year period studied.

TABLE 10.4

BORDERS REGION - NUMBER OF UNCONVENTIONAL PUBLIC TRANSPORT SERVICES 1984/85 TO 1992/93



Source: Borders Regional Council

FIGURE 10.2 BORDERS REGION:UNCONVENTIONAL PUBLIC TRANSPORT 1985.

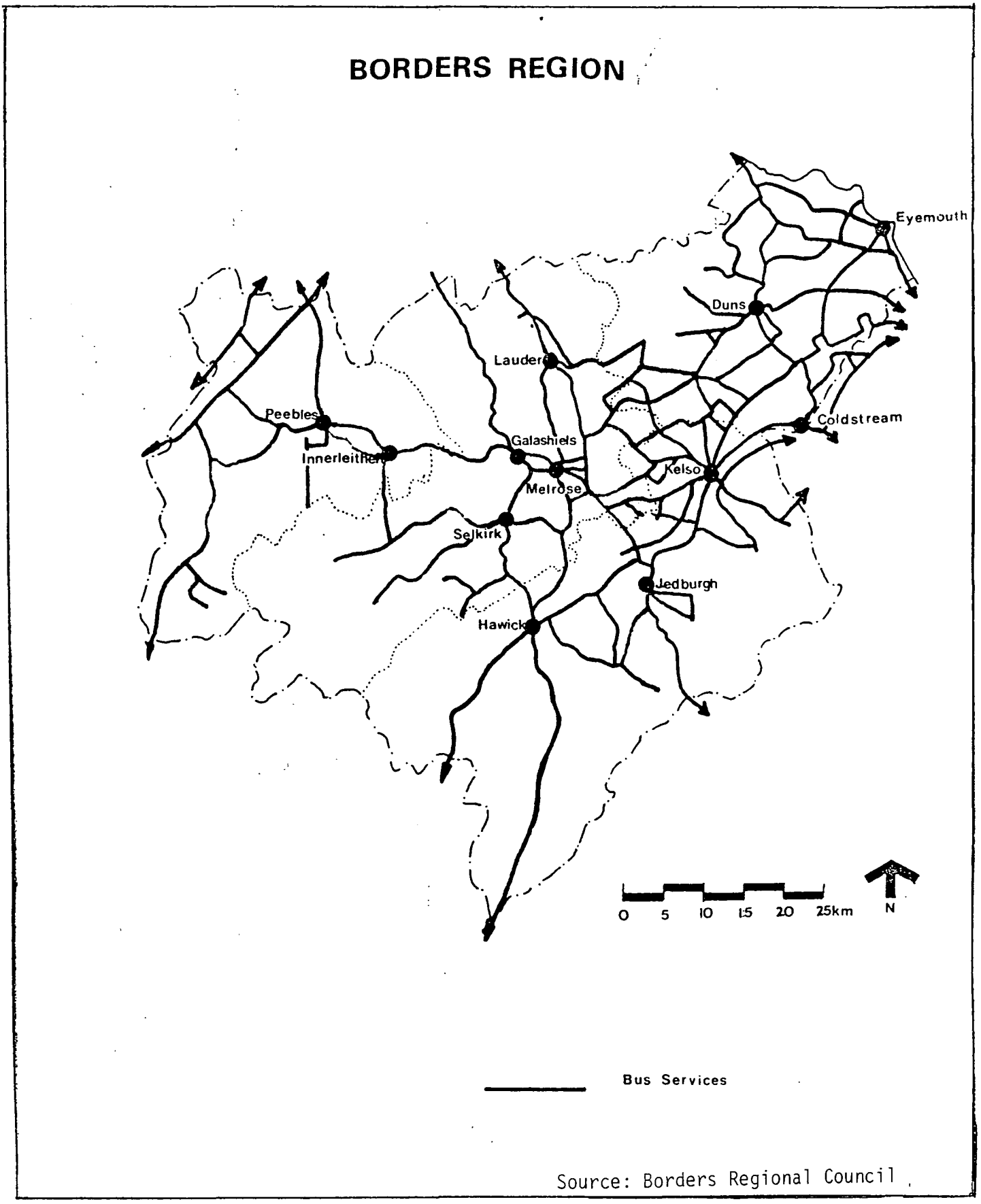


FIGURE 10.3 NETWORK OF BUS SERVICES 1985.

	1984/85	1992/93
Postbus services	14	12
Border Courier	4	4
Community buses	2	1
Voluntary Social Car Shemes	5	7

Source: Borders Regional Council

10.7.5 The Public Transport policy of the Regional Council since the enactment of the Transport Act 1985 is based on one basic duty, namely:

> To secure public transport services to meet the needs of the area in a cost-effective way.

The transport needs of the Region have been identified in the Regional Structure Plan approved by the Secretary of State in December 1980) and in subsequent annual Transport Policy and Programme statements. (15) The emphasis has been placed on the continuation of bus services in support of the economic welfare of the region. In particular, bus services are considered to play an important part in the Council's policy to sustain rural communities and to stem rural de-population.

10.7.6 In order to secure transport to meet these needs efficiently, the council will consider the contribution which can be made to transport services by both conventional and unconventional modes of travel and will promote fair and open competition between alternative transport as required by the Transport Act 1985. The Regional Council, although giving priority to the maintenence of a Strategic Network of bus services, will also support, so far as is within its means, the provision of Secondary

Services includingunconventional services which can be of particular value to the elderly. To date, the council's support for postbuses, the Border Courier Service and for a number of market day minibus services has continued.

10.7.7 Since the passing of the Transport Act 1985 the council has persisted in it support for voluntary social car schemes. Arrangements for the payment of fares by passengers using these services were introduced in 1992. These fares were broadly equivalent to the bus fare, at the concesional rate, for the same distance. The introduction of a fare paying scheme has received a mixed reception from drivers, some of whom are quite prepared to make their own private cars available to the elderly and disabled passengers seeking transport to hospital for treatment, but are reluctant to carry passengers (even fare paying passengers) who wish to use the service for social or entertainment journeys.

10.7.8 Table 10.5 lists capital grants of up to £10,164 which have been awarded to the Regional Council from the Rural Transport Development Fund in the form of Rural Transport Innovation Grants (RTIG). It is evident that these have been used ot purchase replacement vehicles for the former comminity bus service from Bonchester Bridge into Jedburgh and Hawick in 1986. A similar capital grant was also awarded to the prosent community bus running from Ettrick Bridge to Yarrow and Selkirk in 1990. As explained above, this was a new grant introduced by the Transport Act 1985.

10.8 CONCLUSIONS REGARDING THE IMPACT OF THE 1985 TRANSPORT ACT

10.8.1 The above account has shown that the effects of the Transport Act 1985 on the operation of unconventional public transport services throughout rural Scotland have varied between Regions. Some regions, such as Lothian and Strathclyde, have availed themselves of the opportunity provided by the Act, in terms of additional funding through Rural Transport Innovation Grants, to acquire new vehicles in order to operate experimental services. The take-up of rural Transport Innovation Grants has varied considerably between different Regions, with some Regions (Central, Fife, Grampian, Lothian and Orkney) neglecting to claim these grants. The annual fund of £100,000 from the Scottish Office was not fully claimed in certain years.

10.8.2 However, an encouraging sign has been the appointment of Rural Transport Advisers (or Brokers) by the Regional Councils, charged with the responsibility of developing innovatory public transport. These advisers will, no doubt, take the opportunity to exercise the provisions of the act in developing unconventional public transport services in their own Regions and maximising the use of Regional Council vehicles for this purpose.

10.8.3 Nevertheless, it seems that most Regional Councils which had formal policies for the extension of unconventional public transport prior to 1985 are continuing to persist with these policies despite the Act.

10.8.4 In relation to the Highland and Borders Regions, the two case studies, the number of postbus services, community bus services and voluntary social car schemes has remained relatively unchanged and the pattern of services has not been radically affected

by the Act. However, the Act has made new sources of finance available from central government in the form of Transitional Rural Bus Grant and Rural Transport Innovation Grants which have benefited operators of unconventional services. Fuel duty rebate established under the terms of the Transport Act 1968, was not abolished by the 1985 Act and continues to benefit operators of postbus services.

10.8.5 The Act has not led to any significant reduction in the level of subsidy awarded by Regional Councils for the support of tendered conventional bus services, as originally envisaged. In the Borders Region the cost of supporting the network of tendered services has, in fact, risen, from £465,000 in 1986/87 to £649,000 in 1992/93, a rise of 40%. Thus whereas the direct effects of the Act have been limited, the indirect effects, in the form of new sources of finance for the development of unconventional services, have been significant.

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CHAPTER ELEVEN

CONCLUSIONS AND FUTURE PROSPECTS FOR UNCONVENTIONAL PUBLIC TRANSPORT

11.1 INTRODUCTION

11.1.1 The structure of local government in Scotland which will involve the reshaping of regional and district councils is currently (6 October 1994) being considered by the House of Commons. (1) The new 1994 Local Government, etc (Scotland) Bill which recommends the re-organisation of local authority boundaries in Scotland advocates the division of Scotland into 32 councils or unitary authorities. (2) The suggested pattern of new local authorities as at 31 May 1994 is shown in Figure 11.1. This map reveals that both the Highland and Borders Regions remain intact, but as single tier local authorities. However, the proposals do indicate the abolition of all district councils in the Highland and Borders Regions, whose regional councils will enjoy the status of single tier unitary authorities. The Bill makes no special reference to the public transport responsibilities of the regional council, apart from the creation of a separate Strathclyde Passenger Transport Authority. It is therefore assumed that these will remain unchanged in the Highland and Borders Regions. Thus, the forthcoming local government reorganisation in Scotland must be born in mind as the backcloth to the conclusions and statement of future prospects for unconventional public transport outlined below. The reorganisation will take effect from 1 April 1995. The loss of the eight district councils in the Highland Region and the four districts in the Borders Region should have little impact on public transport policy since the transport responsibilities of district councils in rural Scotland have always been strictly limited.

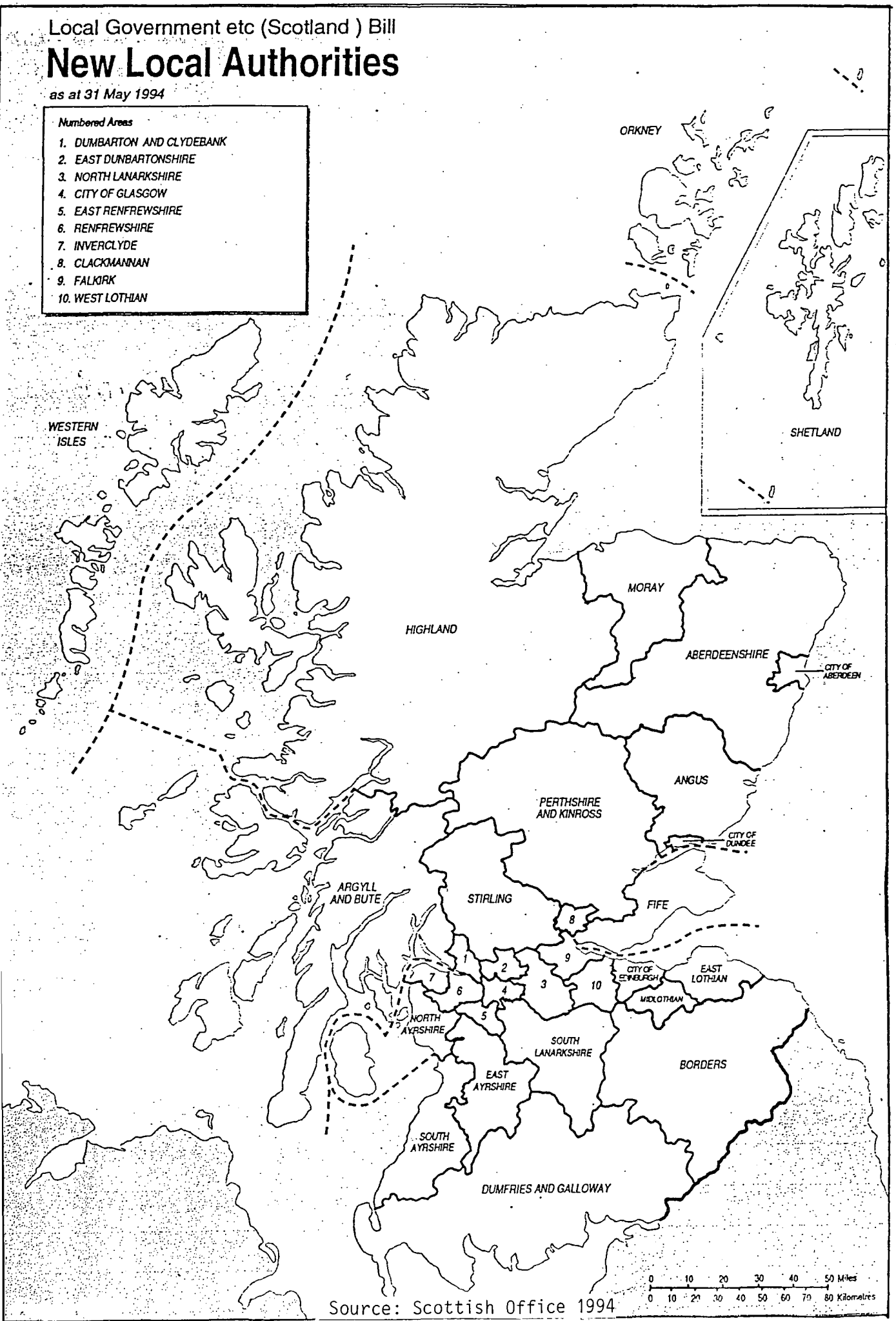

FIGURE 11.1. NEW LOCAL AUTHORITIES 1994.

The regional councils will thus remain the primary initiators of public transport policy, as they have been since the local government reorganisation in Scotland of 1975.

11.1.2 The foregoing chapters have attempted to review the role of unconventional public transport with special reference to the Highland and Borders Regions of Scotland, two of the least densely populated regions of the country. In these regions the market for public transport tends to be generally dispersed and intermittent and opportunities for the expansion of innovatory public transport are considerable. The Highland and Borders Regional case studies have been supplemented by a discussion of the changing number of distribution of unconventional public transport services in other regions of mainland Scotland during the period since the implementation of the 1985 Transport Act, which de-regulated public bus services. The main conclusions which have emerged from the study may be summarised as follows.

11.2 SUMMARY OF CONCLUSIONS

11.2.1 At the outset, it must be appreciated that unconventional public transport carries only a relatively minor proportion of the total number of passengers moved annually by public road passenger transport. In 1984/85 the latest year for which comparable passenger data are available, conventional bus services in the Highland Region carried a total of 4,163,231 passengers, whereas unconventional services, in particular postbus services, carried only 23,475 passengers. Thus the actual contribution made by unconventional services was relatively small (0.6%) if one measures this only in terms of the number of passengers carried. Similarly in the Borders Region conventional bus services carried a total of 4,484,200 passengers

compared with 4,762 passengers using defined unconventional modes (courier, postbus and community bus) in the same year. Thus unconventional services accounted for only 0.1% of all passengers using public road passenger transport.

11.2.2 However, although unconventional schemes carry numerically small passenger traffic, their local importance to the individuals using the service can be great since, in most cases they are the only mode of transport available to the elderly, the disabled and to other disadvantaged sections of an aging population who are without access to private transport or are unable to drive themselves. Thus unconventional services must be recognised as fulfilling a secondary, rather than a primary role in meeting the demand for public transport in the Highland and Borders Region. A similar situation is known to prevail throughout rural Scotland. Unconventional services generally provide a supplementary public transport facility filling gaps left by the withdrawal or absence of conventional bus services and helping to overcome rural deprivation caused by the deteriorating accessibility of many rural areas in Scotland. They also fulfil an important role as a standby facility in areas with relatively high levels of car ownership.

11.2.3 In the Highland and Borders Regions the number of unconventional services has remained relatively unchanged over the period immediately prior to and after the implementation of the Transport Act 1985. Thus policies for unconventional public transport, initiated prior to the Act in many Scottish regions, have continued to be implemented despite the Act. Public Transport Officers of most regional councils

are agreed that the effects of the Act on the role of unconventional transport have been negligible.

11.2.4 Unconventional modes have generally continued to provide a cheaper alternative to the tendered conventional bus services which they have replaced. The contraction of the conventional bus network has been continuous in both the Highland and Borders Region in rural areas, although there has been a rise in vehicle mileage in urban areas since the Transport Act 1985. In the context of rising operating costs of conventional services, unconventional transport has been playing an ever significant role as a lower cost alternative, filling in gaps in areas which have recently lost their regular, conventional bus services.

11.2.5 The thesis has examined the role of unconventional public transport in selected rural areas of Scotland with special reference to the Highland and Borders Regions. It has reached the following conclusions, concerning this role, which may be summarised below.

(a) Basic Advantages of Innovatory Public Transport.

These have been demonstrated to be:

1. Greater convenience and flexibility in that services can be adjusted to meet changing demand, unlike conventional bus services which tend to be confined to a fixed route with fixed stopping points and operate according to clearly defined, published timetables. The voluntary social car schemes, postbus services, dial-a-ride and the community bus provide an almost door-to-door service (even though it is relatively slow) which matches the convenience

of the private car. They all also operate in winter when conventional bus services may be infrequent or non-existent. They thus provide a regular, all the year round, service for the rural community and are not oriented towards meeting the needs of tourists specifically, unlike many conventional bus and rail services.

2. Low cost of subsidy compared with alternative, tendered conventional bus services, in terms of subsidy for passenger. They can thus provide a low cost alternative to the conventional bus.

3. Lower labour costs due to the extensive use of volunteer drivers who generally give their services free of charge, apart from their personal expenses.

4. Additional finance available, since the Transport Act 1985, from central government in the form of:

(a) The Rural Transport Development Fund (known as Rural Transport Innovation Grants (RTIG) in Scotland).

(b) Continuing availability of fuel duty rebate.

(c) (Formerly) Transitional Rural Bus Grant, which was finally phased out in April 1990.

5. Unconventional services can now compete on equal terms with conventional bus services. Conventional services no longer enjoy protection from competition of unconventional services as they had done since the implementation of the 1930 Road

Traffic Act until 1985. During this period they enjoyed a territorial monopoly over their route and were safeguarded from competition from other modes of public passenger transport by the prevailing licensing system and the Traffic Commissioners.

11.3 THE CONTINUING IMPORTANCE OF UNCONVENTIONAL PUBLIC TRANSPORT

11.3.1 The advantages of innovatory public transport in the Highland and Borders Regions have been demonstrated to be as a supplementary service, in many cases as an emergency service, as a lower cost alternative to tendered, conventional bus services, as a more flexible and convenient service and, in areas with a relatively high level of car ownership, as a standby facility when the family car is unavailable. The last is, arguably, now the primary role of unconventional services especially in the context of an aging rural population who may be unable to drive their own cars due to age and disability.

11.3.2 The problems facing unconventional services have been outlined in previous chapters and have been demonstrated to be primarily the problem of recruiting volunteer drivers locally who are willing to give their services free of charge, apart from their personal expenses such as the cost of meals. This has been identified as a problem throughout the Highland Region, where it is known to have discouraged the setting up of community bus services, and in parts of the Borders Region. A considerable degree of dedication, enthusiasm, and personal self-sacrifice and commitment is required from volunteer drivers if the experimental scheme is to get off the ground and continue to run successfully. In the case of voluntary social car

schemes, they must be prepared to make their own private cars available for use by the general public for emergency and other journeys.

11.3.3 Previous chapters have also demonstrated that the continuation of many services is dependent upon the initiative shown by the Regional Public Transport Officers and the constant support, enthusiasm and co-operation of local residents. The great variety of innovatory public transport schemes available in the Borders Region, for example, is known to be largely due to the initiative of a forward looking Public Transport Officer.

11.3.4 The relatively high cost of replacing community buses, when the vehicle has become life-expired, has also been identified as a pressing problem where the local community cannot raise the finance necessary to purchase a new bus. The phasing out of New Bus Grant in 1984 which has been available to bus operators to assist them to run stage carriage services since the Transport Act 1968, has not helped this situation.

11.3.5 Another immediate problem facing the setting up of experimental schemes is the need to preserve a partnership and a good working relationship between local residents (who provide the drivers), the regional council (which provides the subsidy and the expertise) and the bus operator (who can provide for the servicing and repair of the vehicle). The Public Transport Co-ordinating Officer has a key role to play in this partnership.

11.4 THE EFFECTS OF THE TRANSPORT ACT 1985

11.4.1 It is important to differentiate between the direct and the indirect effects of the Act. The Act has generally had little direct effect, from evidence provided by Public Transport Officers, in that policies for unconventional public transport, initiated prior to the Act, have been implemented despite the provisions of the Act.

11.4.2 The indirect effects of the Act, on the other hand, have been significant and have been expressed in terms of new and additional sources of finance from central government. This took the form (until 1990) of the availability of Transitional Rural Bus Grant and finance from the Rural Transport Development Fund, administered through the Scottish Office in Scotland as Rural Transport Innovation Grants. The take-up of these grants under the terms of S108 of the Transport Act 1985 has, however, been slow and has been fully described in Chapter 10. The Act did not abolish fuel tax rebate which has continued to benefit operators of stage carriage bus services and has been a major inducement to the post office to develop postbus services in place of mail van routes.

11.4.3 The effect of the Act has generally been expressed, whose applicable, in the further development of dial-a-ride services, for example in Grampian and Strathclyde Regions. However, although the cost of subsidy provided by regional councils to maintain basic minimum levels of bus service has generally been reduced as a result of the Act (eg in the Highland Region) this saving has not been great. In the Borders Region, on the other hand, revenue support for public transport rose from £533,000 in 1985/86 to £649,000 in 1992/93 during the era of implementation of the Act.

11.4.4 The introduction of competitive tendering for socially desirable, but unremunerative services, which was one of the main features of the Act, has been used by several progressive Public Transport Officers as an instrument of transport policy to achieve a co-ordinated and integrated network of bus services. The closer co-ordination of bus services (including unconventional bus services) has been a condition of the award of a subsidy to the operator (for example in parts of the Highland Region). In this way basic minimum levels of service have been maintained and economies achieved by the regional council.

11.5 FUTURE PROSPECTS FOR UNCONVENTIONAL PUBLIC TRANSPORT

11.5.1 Future prospects for unconventional public transport seem to be good and there appears to be considerable potential for further growth in the following fields.

1. <u>The greater use of school vehicles by fare paying passengers</u>. An extensive network of school services already operates which could be used, where spare capacity exists, by the rest of the community, at no additional cost to the regional council. Highland and Borders Regional Councils are already investigating the financial advantages of making school contract bus and taxi services more readily available for use by the general travelling public. The use of school vehicles by fare-paying passengers is probably the greatest potential growth area in unconventional public transport and has been fully discussed in Chapter 9.

2. <u>The development of Courier-type services, using general purpose vehicles, already operated by the</u>

Local Authority for the carriage of both passengers and parcels. The Borders Courier Service is a classic and internationally known example of the use of dual-purpose vehicles whereby the revenue earned from the movement of freight is used to cross-subsidise the carriage of passengers. It is suggested that local authorities should take a greater initiative in developing Courier-type services using their own vehicles, in order to extend the availability of public passenger transport to areas without adequate conventional bus services.

3. Further expansion of Dial-a-Ride services. Currently dial-a-ride services have been developed only in the Grampian and Strathclyde Regions and there are only 13 such services in the whole of rural Scotland. Further expansion and experimentation with dial-a-ride schemes should be initiated in both the Borders and Highland Regions and has been advocated by several prominent local residents. In the opinion of the writer there has been an overemphasis on postbus services, at the expense of other unconventional modes, in the Highland Region where the establishment of dial-a-ride, community bus services and voluntary social car schemes should be explored. In fact, the Roads and Transport Department of the Regional Council are currently undertaking surveys of all community councils with a view to setting up new experimental public transport schemes. However, it seems likely that the region will continue to rely on its 44 postbus services, supplemented by school transport services where necessary, as a secondary public transport network operating as a physical extension of the network of conventional bus and rail services.

11.6 OVERALL CONCLUSION

11.6.1 Thus the role of unconventional public transport is expanding and developing in rural Scotland. The Transport Act 1985 has contributed to this expansion of patronage and services, but has not been a major cause of growth in that policies for unconventional services, initiated prior to the Act, are still being implemented despite the provisions of the Act. No doubt unconventional public transport will continue to fulfil its role to provide a supplementary facility and an emergency service in some areas. It can also provide a low cost alternative to conventional bus services where the market for the latter is limited by high levels of car ownership and a geographically dispersed settlement pattern and low population densities. Although the number of passengers carried by innovatory public transport is small, its local importance to the elderly and immobile members of the rural community who rely on it to provide access to shopping, medical and social facilities, in the absence of conventional bus or rail services or the availability of a private car, should not be underestimated.

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APPENDIX A

SURVEY OF UNCONVENTIONAL PUBLIC TRANSPORT IN SCOTLAND 1993

1. Post Bus Services (Supported by Regional Council)

Number of Services | Origin and Destination of each Service

---

2. Community Bus Services (Supported by the Regional Council)

Number of Services | Area served by each Service

---

3. Voluntary Social Car Schemes (Supported by the Regional Council)

Number of Schemes | Area served by each Scheme

4. Dial - a - Ride Schemes. (Supported by the Regional Council)

Number of Schemes | Area served by each Scheme

---

5. Other Car Sharing Arrangements (Supported by the Regional Council)

(Please specify)

Number of Schemes. | Area served by each Scheme

---

6. School Bus Services used by fare paying passengers.
(Formerly Section 30. 1968 Transport Act Services)

Number of Services | Origin and Destination of each Service

---

7. Comments on the effect of the Transport Act 1985 on unconventional public transport arrangements in your Region

APPENDIX B

BORDERS REGION

SURVEY OF PUBLIC TRANSPORT NEED 1994

_____ DISTRICT COUNCIL

_____ COMMUNITY COUNCIL

---

1. Do local Public Bus Services meet the needs of the local community in terms of route, frequency and timing?

YES/NO

---

2. If not, what improvements would you suggest?

Origin of service	Destination of Service	Frequency

---

3. Do you consider there is any scope for the development of unconventional public transport (Post Bus Services, Dial - a - Ride Community Bus Services, or Voluntary Social Car Schemes) in your Community Council area?

YES/NO

---

4. If yes, could you suggest any journeys which might be introduced to supplement existing conventional bus services, using unconventional public transport?

Origin	Destination	Frequency (Daily, Weekly etc.)	Type of Journey (Post bus Community Bus etc.)

---

5. Comments on the adequacy of public transport in your Community Council Area and suggested improvements.

APPENDIX C

HIGHLAND REGION

RESULTS OF SURVEY OF POTENTIALFOR DEVELOPMENT OF COMMUNITY PUBLIC TRANSPORT SERVICES (BY COMMUNITY COUNCIL AREAS)

DISTRICT	COMMUNITY COUNCIL	PUBLIC TRANSPORT NEED		
		NO PROBLEM	POSSIBLE EXPERIMENTAL SERVICES	USE OF EDUCATION OR SOCIAL SERVICE VEHICLE
CAITHNESS	BERRIEDALE			
	BOWER			
	CASTLETOWN			
	HALKIRK			
	LATHERON			
	THURSO			
	WATTEN		*	
	WICK			
	CAITHNESS WEST			*
SUB TOTAL (9 CCS)	(7 No Response)	-	1	1
SUTHERLAND	ASSYNT			*
	BETTYHILL	*		
	BRORA			
	CREICH		*	*
	DORNOCH			
	DURNESS	*		
	GOLSPIE	*		
	HELMSDALE			
	KINCARDINE			
	KINLOCHBERVIE			*
	LAIRG	*		
	MELVICH		*	
	STRATHY			
	ROGART			*
	TONGUE			
	SCOURIE	*		
SUB TOTAL (16 CCS)	(7 No Responses)	5	2	4

DISTRICT	COMMUNITY COUNCIL	PUBLIC TRANSPORT NEED		
		NO PROBLEM	POSSIBLE EXPERIMENTAL SERVICES	USE OF EDUCATION OR SOCIAL SERVICE VEHICLE
ROSS & CROMARTY	ALNESS	*		
	APPLECROSS	*		
	ARDROSS			
	ALTBEA			
	AVOCH			*
	COIBACH			
	CANNON BRIDGE			
	CONTIN	*		
	CROMARTY & DISTRICT			*
	DINGWALL			
	EDDERTON			
	EVANTON		*	
	FEARN			
	FERINTOSH			
	FORTROSE		*	
	GAIRLOCH		*	*
	INVER			
	INVERGORDEN			
	KILLEARNAN			
	KILMUIR			
	KNOCKBAIN	*		
	LOCKBROOM			
	LOCHCARRON			*
	MAYBANK			
	MAYBURGH			
	MUIR OF ORD	*		
	NIGG & SKIANDWICK		*	
	RESOLIS			*
	SALTBURN	*		
	STRATHPEFFER	*		
	TAIN	*		
	TARBAT		*	
	TORRIDON			*
	WESTER LOCHEWE			*
SUB TOTAL (34 CCS)	(15 No Responses)	8	5	7

APPENDIX C

DISTRICT	COMMUNITY COUNCIL	PUBLIC TRANSPORT NEED		
		NO PROBLEM	POSSIBLE EXPERIMENTAL SERVICES	USE OF EDUCATION OR SOCIAL SERVICE VEHICLE
INVERNESS	ARDERSIER			*
	BALLOCH	*		
	BEAULY			*
	CROY			
	CULCABOCK			
	DALNEIGH			
	DORES		*	
	FORT AUGUSTUS			*
	GLENURQUART			
	HILTON			
	HOLM		*	
	INVERNESS WEST	*		
	KILMORACH			
	KILTARLITY	*		
	KIRKHILL			
	MERLINCH	*		
	MUIRTOWN		*	
	RAIGMORE			
	SMITHTON			
	STRATHDEARN	*		
	STRATHERRICK			
	STRATHGLASS			
	SRATHNAIRN	*		
	WESTHILL	*		
SUBTOTAL (24 CCS)	(11 No Response)	7	3	3

NAIRN	NAIRN RIVER		*	
SUBTOTAL (1 CC)	(0 No Response)	–	1	–

BADENOCH AND STRATHSPEY	AVIEMORE			*
	BOAT OF GARTEN	*		
	CARRBRIDGE	*		
	CROMDALE			
	DULNAIN			*
	GRANTOWN-ON-SPEY			*
	KINCRAIG			
	KINGUSSIE			
	NETHYBRIDGE	*		
	NEWTONMORE			
SUB TOTAL (10 CCS)	(4 No Response)	3	–	3

DISTRICT	COMMUNITY COUNCIL	PUBLIC TRANSPORT NEED		
		NO PROBLEM	POSSIBLE EXPERIMENTAL SERVICES	USE OF EDUCATION OR SOCIAL SERVICE VEHICLE
LOCHABER	ACHARACLE			
	ACHNACARRY			
	ARDGOUR			
	ARISAIG	*		
	BALLACHULISH			*
	CAOL			
	DUROR			
	FORT WILLIAM		*	
	GLENFINNAN	*		
	GLENGARRY			*
	INVERLOCHY			
	KINLOCHLEVEN			
	MALLAIG			
	MORAR			
	MORVEN			*
	NETHER LOCHABER			
	SMALL ISLES			
	SUNART	*		
	W. ARDNAMURCHAN			*
SUBTOTAL (19 CCS)	(11 No Response)	3	1	4

DISTRICT	COMMUNITY COUNCIL	PUBLIC TRANSPORT NEED		
		NO PROBLEM	POSSIBLE EXPERIMENTAL SERVICES	USE OF EDUCATION OR SOCIAL SERVICE VEHICLE
SKYE & LOCHALSH	BRAES	*		
	BROADFORTH & STRATH			
	DUNVEGAN			*
	GLENDALE		*	
	GLENELY & ARMISDALE		*	
	KILMUIR			*
	KYLE			
	KYLEAKIN	*		
	LOCHALSH & LOCHLONG		*	
	LOCHDUICH			
	MINGINISH			*
	PLOCKTON			*
	PORTREE			
	RAASAY			
	SKEABOST	*		
	SLEAT			
	STAFFIN			
	STROMEFERRY			
	STRUAN			*
	UIG			*
	WATERNISH			
SUBTOTAL (21 CCS)	(9 No Return)	3	3	6

TOTAL HIGHLAND REGION (134 CCS)	(64 No Response)	29	16	28
%RESPONSE	48%	22	12	21

APPENDIX D

COMMUNITY TRANSPORT.

RESPONSE FROM TONGUE COMMUNITY COUNCIL.

INTRODUCTION

Tongue Community Council represents a population of some 500 people who live in what are three discrete communities in one of the most rural and remote areas in mainland Britain

Tongue is two hours drive from Inverness in the South in good weather and the last 40 miles of the journey are made on single track roads. The nearest town for services such as dentistry and ophthalmology is Thurso which is 45 miles East of Tongue and which is approached largely on single track roads. The nearest General Hospital is at Wick which is 70 miles to the East. Inverness is an alternative and certain specialised cases require transport to Aberdeen. The nearest village to the West is Durness which is 30 miles away. To the East the nearest village is Bettyhill which is 18 miles distant. The nearest railway station is 40 miles to the South. There is no public transport

Community transport was non-existent in North Sutherland until the arrival of an "Age Concern" minibus in Bettyhill some three years ago. This vehicle is not available for open hire due to funding restrictions on user and as a result of Insurance considerations. There is no paid driver for this vehicle and the use is effectively limited to the elderly client group in the immediate vicinity of Bettyhill and this and the logistics of manning this bus with volunteers and covering the necessary distances to collect and return the bus before and after any journey is made, rule it out as transport for these communities.

The communities are:-

Tongue village and its outliers. Tongue is the principal village and has two shops, two hotels and a primary school, bank and a doctor's surgery. There isalso a Church and a community hall.

Skerray is a crofting community 10 or so miles to the east of Tongue and has a Church, a community hall and a post office. Over 40% of the population are over the age of 65.

Melness is a crofting community on the west side of the Kyle of Tongue. Over 80% of the housing stock is made up of holiday homes and the population is ageing. There is a community centre and a post office. There is also an old persons' resource centre there. This provides a wide range of social services to the area. The developments associated with this centre have resulted in a significant injection of paid employment into this small community.

THE EXISTING PROBLEMS.

There are severe problems through lack of available transport across a wide spectrum of the population and it is only those who can afford and who are able to drive their own transport who can be said to be mobile and free of obligation to friends and neighbours. the problems can be broken down by client groups as follows

Young People

The children and youth of the area are heavily dependent on transport to participate in activities that the area can offer and those further afield. It has become obvious that the children are missing important aspects of their education and the enrichment of their lives because of our geographical location. We should endeavour to redress this by energetically pursuing the options for providing this much needed resource.

The present situation is the availability of Education minibus hire from Golspie which is an obvious time consuming exercise (3 hours round trip for pick up and delivery) or use of the minibus based in Bettyhill (again supplied by the Education) but with the disadvantage that it is used for the school runs to Skerray thereby severely restricting the time it is available.
The following is the potential use by youth and child groups of the area.

Groups	Use
School	Visits within local areas to study environment Activity weekends. Field trips outwith the limited local environment Sports Fixtures Conferences (Gaelic, History etc) Visits to the elderly
Youth Club	Theatre/Music performances Visits to places of interest/sports Activity weekends Visits to other clubs
2 Play Groups (Gaelic/English)	Picking up children and mothers (who otherwise would not be able to attend) Visits e.g. Swimming pool, play parks, children's theatre etc.
Youth Football Club	Matches with other clubs Training sessions with coaches (usually held on the East coast).
Junior Badminton Club	Sports Fixtures

The Elderly.

The only transport available to these people in the area is the use of one of two minibuses. These are run by two voluntary associations. One is the bus described in the introduction which is based in Bettyhill and the other is an old minibus which is owned and operated by a small charity which supports the elderly persons' resource centre. This latter bus is free from funding restraints and is operated under a Section 19 licence and so is able to cater for general community purposes providing it is not run at a profit. There is no chance of this happening as the cost of running the vehicle is well in excess of what can be recouped from users even though volunteer drivers are used. There is a constant problem of obtaining suitable volunteer drivers and attendants who will undertake the necessary responsibility.

The following is the potential use by elderly people and groups of elderly people in the area:-

The Wednesday Club	Shopping trips to town Visits to other groups Visits to places of interest Transport to club

The Caladh Sona Unit	As above for residents of the Unit Transport of people to and from day care Transport to music/theatre activities Hospital visiting transport Bank facilities and pension collection Visits to services such as dentist
The Friends of Caladh Sona Group	Transport of people for activities over and above what can be offered by the staff group

The Disadvantaged

There are a number of people in the area who suffer from long term unemployment or who live on low incomes and who cannot afford their own means of transport. For these people life can be difficult and they have to rely on the goodwill of friends and neighbours for basic transport needs that most people take for granted. These include most of the services listed above for other client groups.

POTENTIAL SOLUTIONS TO THE PROBLEMS

It would seem that logically the best solution in these small rural communities is the introduction of a properly funded community bus available across the spectrum of need and with a flexible charging structure to reflect the socio-economic conditions prevailing in extremely rural areas. The provision of a suitably sized and equipped bus with a dedicated full time driver would enable solutions to be found to some of the problems outlined. If possible such a vehicle should, in addition, be available to voluntary groups outside dedicated hours on realistic terms. It is unlikely however that such a vehicle would by itself meet all our needs.

22 Oct 1993

CAR OWNERSHIP LEVELS IN HIGHLAND REGION 1991.

Zone No.	Settlement Zone	Total Households	Households with			
			No Car	1 car	2 cars	3 or more cars
	BADENOCH & STRATHSPEY					
SZ101	AVIEMORE	876	307	425	127	17
SZ102	BOAT OF GARTEN	242	32	136	59	15
SZ103	CARRBRIDGE	215	40	109	54	12
SZ104	DALWHINNIE	46	9	24	10	3
SZ105	GRANTOWN	1360	315	739	258	48
SZ106	KINCRAIG	144	21	81	36	6
SZ107	KINGUSSIE	630	193	296	123	18
SZ108	KINLOCHLAGGAN	18	4	9	4	1
SZ109	LAGGAN	80	5	54	18	2
SZ110	NETHYBRIDGE	290	58	175	44	13
SZ111	NEWTONMORE	463	127	243	74	18
	DISTRICT TOTAL	**4364**	**1111**	**2291**	**807**	**153**
	CAITHNESS					
SZ201	ALTNABREAC	3	0	1	1	0
SZ202	BOWERMADDEN	113	16	60	28	9
SZ203	CASTLETOWN	494	159	247	77	11
SZ204	DUNBEATH	208	64	121	21	2
SZ205	DUNNET	326	63	174	75	14
SZ206	HALKIRK	615	132	325	132	27
SZ207	JOHN O'GROATS	179	33	103	35	8
SZ208	KEISS	242	68	108	57	9
SZ209	LIEURARY	58	4	28	19	7
SZ210	LYBSTER	480	165	232	77	6
SZ211	REAY	215	38	118	49	10
SZ212	THRUMSTER	165	44	89	25	7
SZ213	THURSO	3662	1385	1847	371	59
SZ214	WATTEN	249	61	131	47	10
SZ215	WICK	3425	1611	1466	285	63
	DISTRICT TOTAL	**10434**	**3843**	**5050**	**1299**	**242**

CAR OWNERSHIP LEVELS IN HIGHLAND REGION

Zone No.	Settlement Zone	Total Households	Households with			
			No Car	1 car	2 cars	3 or more
	INVERNESS					
SZ301	ARDERSIER	502	150	248	82	22
SZ302	BALNAIN	82	8	45	24	5
SZ303	BEAULY	617	189	294	101	33
SZ304	BUNCHREW	173	33	84	49	7
SZ305	CANNICH	166	25	90	39	13
SZ306	CROACHY	40	3	18	15	4
SZ307	CROY	198	43	92	57	7
SZ308	CULLODEN	3190	638	1768	698	86
SZ309	CULLODEN MOOR	171	11	83	61	17
SZ310	DALCROSS	131	20	60	38	13
SZ311	DAVIOT	98	6	45	43	5
SZ312	DORES	103	17	51	27	8
SZ313	DRUMNADROCHIT	430	110	200	102	17
SZ314	DUNDREGGAN	40	4	23	11	2
SZ315	FARR	67	4	37	20	5
SZ316	FORT AUGUSTUS	260	70	136	44	10
SZ317	FOYERS	149	44	62	37	7
SZ318	INVERMORISTON	60	7	46	4	3
SZ319	INVERNESS	16539	6652	7721	1930	236
SZ320	KILTARLITY	383	67	171	107	36
SZ321	KIRKHILL	246	36	122	74	14
SZ322	LOCHEND	103	13	61	24	5
SZ323	MONIACK	90	8	41	31	11
SZ324	MOY	33	3	15	13	2
SZ325	STRATHERRICK	85	8	52	18	7
SZ326	STRUY	101	8	45	32	16
SZ327	TOMATIN	128	16	56	40	16
	DISTRICT TOTAL	**24185**	**8193**	**11666**	**3721**	**607**

CAR OWNERSHIP LEVELS IN HIGHLAND REGION

Zone No.	Settlement Zone	Total Households	Households with			
			No Car	1 car	2 cars	3 or more
	LOCHABER					
SZ401	ACHARACLE	232	43	124	53	12
SZ402	ACHNACARRY	28	4	10	12	2
SZ403	ARDGOUR	74	12	44	15	3
SZ404	ARISAIG	184	53	88	28	15
SZ405	BALLACHULISH	375	104	194	67	10
SZ406	CAMUSNAGAUL	70	11	40	14	5
SZ407	FORTWILLIAM	4044	1473	1929	523	119
SZ408	GLENBORRODALE	46	7	22	15	2
SZ409	GLENCOE	129	25	73	27	4
SZ410	GLENFINNAN	41	4	27	11	0
SZ411	INVERGARRY	154	29	86	29	10
SZ412	KILCHOAN	74	20	38	16	2
SZ413	KINGAIRLOCH	13	1	8	3	2
SZ414	KINLOCHLEVEN	484	209	232	31	11
SZ415	KNOYDART	25	8	8	6	3
SZ416	LOCHALINE	144	30	74	36	3
SZ417	MALLAIG	336	120	152	57	7
SZ418	MORAR	82	19	42	19	2
SZ419	NORTH BALLACHULISH	59	5	32	18	4
SZ420	ONICH	86	16	37	27	6
SZ421	ROY BRIDGE	159	31	75	40	13
SZ422	SMALL ISLES	56	30	25	1	0
SZ423	SPEAN BRIDGE	243	38	134	56	15
SZ424	STRONTIAN	137	25	80	24	8
	DISTRICT TOTAL	**7275**	**2317**	**3574**	**1128**	**258**
	NAIRN					
SZ501	AULDEARN	379	74	186	98	20
SZ502	CAWDOR	343	46	180	92	24
SZ503	FERNESS	70	4	30	29	7
SZ504	NAIRN	3307	1147	1640	469	51
	DISTRICT TOTAL	**4099**	**1271**	**2036**	**688**	**102**

CAR OWNERSHIP LEVELS IN HIGHLAND REGION

Zone No.	Settlement Zone	Total Households	Households with			
			No Car	1 car	2 cars	3 or more
	ROSS & CROMARTY					
SZ601	ACHILTIBUIE	125	22	68	31	5
SZ602	ACHNASHEEN	14	1	10	2	0
SZ603	ALNESS	2088	876	898	266	49
SZ604	APPLECROSS	95	25	48	20	2
SZ605	ARDROSS	121	13	59	43	5
SZ606	AULTBEA	230	53	122	49	6
SZ607	AVOCH	418	115	205	80	18
SZ608	BALBLAIR	160	19	86	45	10
SZ609	CONON BRIDGE	661	135	334	168	24
SZ610	CONTIN	156	20	90	33	13
SZ611	CROMARTY	347	115	170	55	7
SZ612	CULBOKIE	241	29	114	75	23
SZ613	DINGWALL	2036	669	1009	311	47
SZ614	DUNDONNELL	67	11	39	15	3
SZ615	EDDERTON	137	19	71	36	11
SZ616	EVANTON	575	127	278	136	34
SZ617	FEARN	166	41	85	33	6
SZ618	FORTROSE	760	165	372	189	34
SZ619	GAIRLOCH	393	97	193	87	16
SZ620	GARVE	108	26	52	27	3
SZ621	INVER	154	24	93	31	4
SZ622	INVERASDALE	69	12	35	19	3
SZ623	INVERGORDON	1624	638	794	178	14
SZ624	KILCOY	118	13	52	43	10
SZ625	KILDARY	516	137	261	102	16
SZ626	KILLEN	15	1	8	5	1
SZ627	KINKELL	97	2	47	42	6
SZ628	KINLOCHEWE	35	4	26	6	0
SZ629	LOCHCARRON	360	76	197	73	14
SZ630	MARYBANK	135	16	76	33	9
SZ631	MARYBURGH	473	80	262	116	15
SZ632	MUIR OF ORD	1000	261	464	226	49
SZ633	MUNLOCHY	236	43	121	60	12
SZ634	NEWMORE	70	1	34	29	6
SZ635	NIGG	62	4	38	16	4
SZ636	NORTH KESSOCK	520	85	263	143	29
SZ637	POOLEWE	84	23	45	14	2
SZ638	PORTMAHOMACK	230	47	131	44	10
SZ639	RESOLIS	81	0	40	40	1
SZ640	SCORAIG	28	4	15	6	3
SZ641	SCOTSBURN	55	4	27	18	6
SZ642	SEABOARD	586	188	280	97	22
SZ643	SHIELDAIG	61	14	33	11	3
SZ644	STRATHCONON	53	10	26	15	3
SZ645	STRATHPEFFER	513	120	254	119	20
SZ646	TAIN	1592	550	771	223	48
SZ647	TORE	81	16	42	17	6
SZ648	TORRIDON	90	22	48	19	1
SZ649	ULLAPOOL	613	178	329	93	14
	DISTRICT TOTAL	**18449**	**5151**	**9115**	**3539**	**647**

CAR OWNERSHIP LEVELS IN HIGHLAND REGION

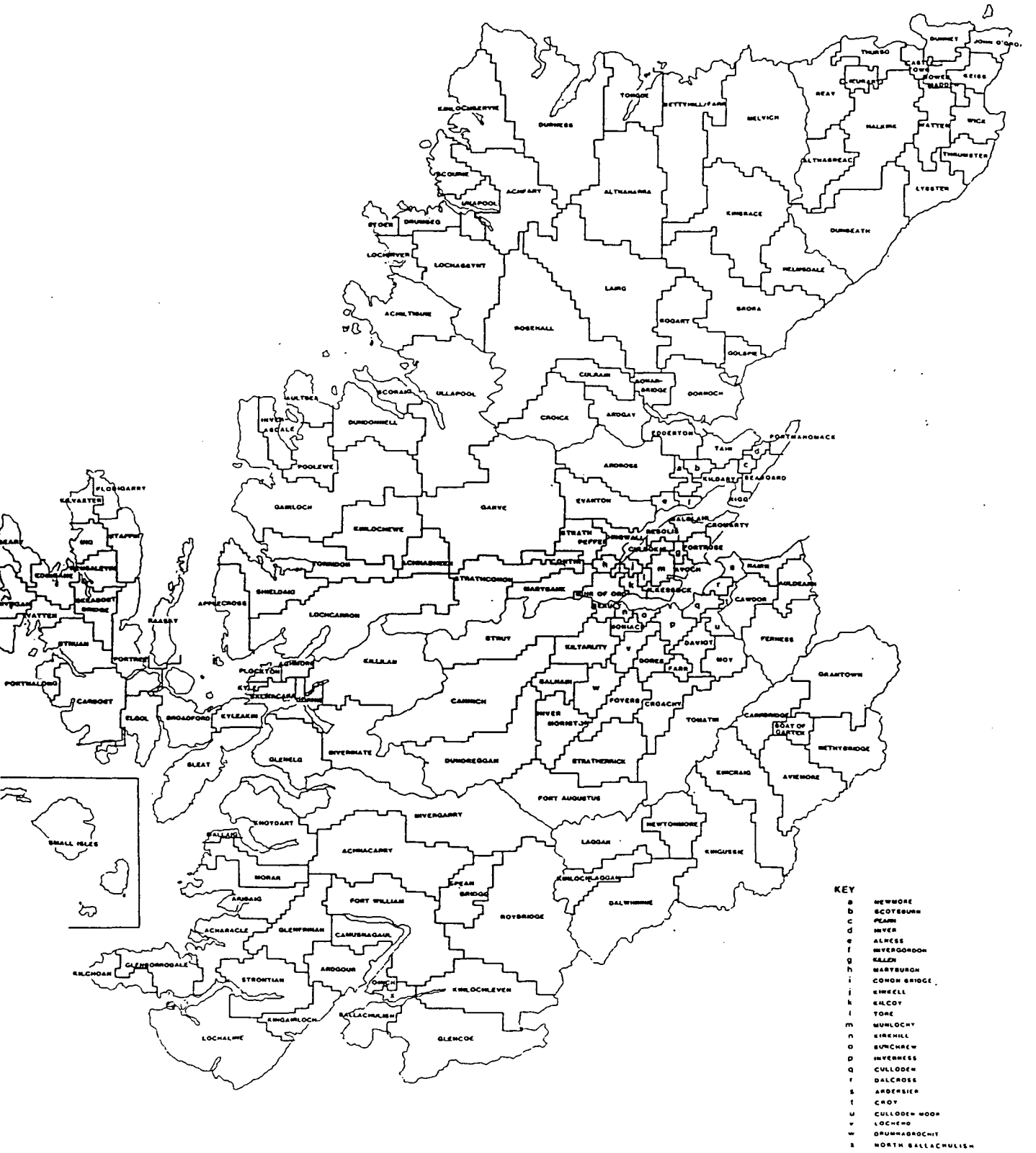
Zone No.	Settlement Zone	Total Households	Households with			
			No Car	1 car	2 cars	3 or more
	SKYE & LOCHALSH					
SZ701	ACHMORE	45	6	31	8	0
SZ702	BALMACARA	92	13	60	14	4
SZ703	BROADFORD	457	134	226	86	11
SZ704	CARBOST	96	22	48	22	4
SZ705	DORNIE	99	22	57	17	3
SZ706	DUNVEGAN	141	41	70	26	3
SZ707	EDINBANE	99	25	50	19	5
SZ708	ELGOL	60	14	29	13	3
SZ709	FLODIGARRY	88	30	39	14	6
SZ710	GEARY	110	18	70	22	0
SZ711	GLENDALE	132	23	86	23	0
SZ712	GLENELG	97	24	49	23	1
SZ713	INVERINATE	140	25	77	31	7
SZ714	KENSALEYRE	58	10	34	11	2
SZ715	KILLILAN	44	2	23	17	2
SZ716	KILVAXTER	87	31	37	13	5
SZ717	KYLE	320	102	185	28	5
SZ718	KYLEAKIN	158	49	86	21	2
SZ719	PLOCKTON	177	49	93	32	3
SZ720	PORTNALONG	83	25	44	12	2
SZ721	PORTREE	926	315	460	142	9
SZ722	RAASAY	76	27	42	6	1
SZ723	SKEABOST BRIDGE	175	33	88	42	12
SZ724	SLEAT	290	70	173	42	5
SZ725	STAFFIN	113	39	54	18	2
SZ726	STRUAN	82	12	47	17	6
SZ727	UIG	152	44	81	22	6
SZ728	VATTEN	110	15	66	22	8
	DISTRICT TOTAL	**4507**	**1220**	**2405**	**763**	**117**

CAR OWNERSHIP LEVELS IN HIGHLAND REGION

Zone No.	Settlement Zone	Total Households	Households with			
			No Car	1 car	2 cars	3 or more
	SUTHERLAND					
SZ801	ACHFARY	22	2	20	0	0
SZ802	ALTNAHARA	25	3	12	7	3
SZ803	ARDGAY	197	55	84	49	9
SZ804	BETTYHILL/FARR	250	65	114	67	4
SZ805	BONAR BRIDGE	283	98	129	39	17
SZ806	BRORA	831	293	413	105	19
SZ807	CROICK	6	1	3	2	0
SZ808	CULRAIN	44	5	21	14	3
SZ809	DORNOCH	917	240	503	146	28
SZ810	DRUMBEG	37	8	25	3	2
SZ811	DURNESS	142	38	69	29	6
SZ812	GOLSPIE	677	232	327	101	17
SZ813	HELMSDALE	382	170	176	34	2
SZ814	KINBRACE	26	4	11	10	1
SZ815	KINLOCHBERVIE	192	67	95	24	6
SZ816	LAIRG	366	86	199	67	14
SZ817	LOCHASSYNT	40	7	24	8	0
SZ818	LOCHINVER	259	78	146	31	5
SZ819	MELVICH	242	80	121	34	7
SZ820	ROGART	173	42	83	36	13
SZ821	ROSEHALL	93	18	53	20	2
SZ822	SCOURIE	98	17	52	18	10
SZ823	STOER	58	15	36	7	1
SZ824	TONGUE	196	61	102	29	4
SZ825	UNAPOOL	44	8	27	5	3
	DISTRICT TOTAL	**5600**	**1693**	**2845**	**885**	**176**
	HIGHLAND REGION	**78913**	**24799**	**38982**	**12830**	**2302**

SOURCE: HIGHLAND REGIONAL COUNCIL.

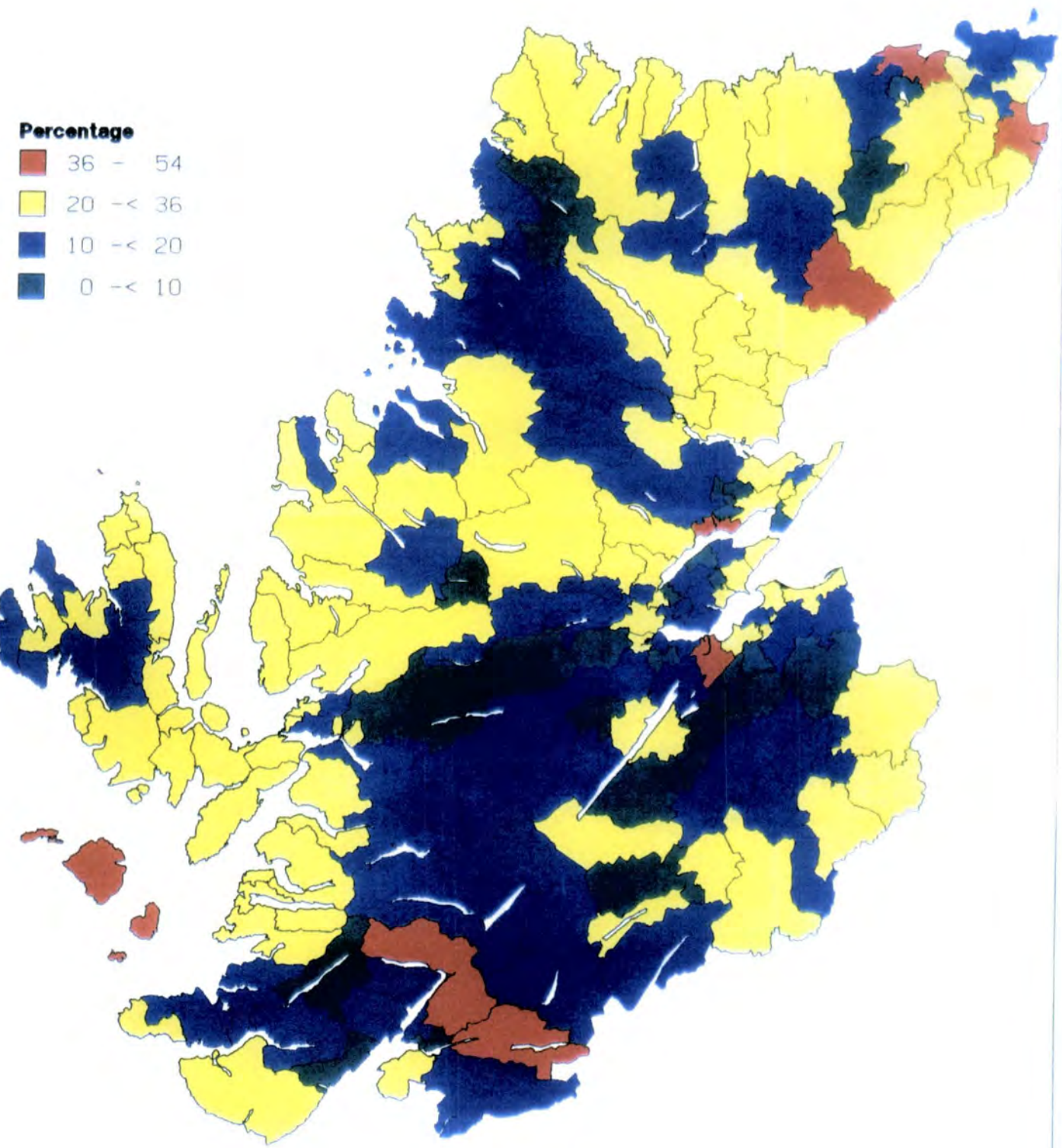
APPENDIX E.(continued).



SOURCE :HIGHLAND REGIONAL COUNCIL.

Households with No Car in Highland Region

1991.



SOURCE: HIGHLAND REGIONAL COUNCIL.

APPENDIX F.

Car Ownership – Borders Region and Districts 1991

	Total Households	Households with No car		Households with 1 car		Households with 2 cars		Households with 3 or more cars	
		No	%	No	%	No	%	No	%
Berwickshire	7889	2099	26.6	4034	51.1	1426	18.1	330	4.2
Ettrick & Lauderdale	14220	4452	31.3	6756	47.5	2504	17.6	508	3.6
Roxburgh	14765	5097	34.5	7001	47.4	2190	14.8	477	3.2
Tweeddale	6369	1926	30.2	2876	45.2	1309	20.6	258	4.1
Borders Region	43243	13574	31.4	20667	47.8	7429	17.2	1573	3.6

Car Ownership by Settlement – Berwickshire District

Settlements	Total Households	Households with No car		Households with 1 car		Households with 2 cars		Households with 3 or more cars	
		No	%	No	%	No	%	No	%
ABBEY ST BAT	15	2	13.3	9	60.0	3	20.0	0	0.0
ALLANTON	46	4	8.7	29	63.0	12	26.1	0	0.0
AUCHENCROW	14	1	7.1	9	64.3	2	14.3	1	7.1
AYTON	214	45	21.0	108	50.5	47	22.0	11	5.1
BIRGHAM	53	6	11.3	30	56.6	12	22.6	4	7.5
BURNMOUTH	106	41	38.7	49	46.2	11	10.4	5	4.7
CHIRNSIDE	502	156	31.1	263	52.4	72	14.3	11	2.2
COCKBURNSPAT	153	35	22.9	86	56.2	28	18.3	2	1.3
COLDINGHAM	262	67	25.6	128	48.9	51	19.5	15	5.7
COLDSTREAM	779	267	34.3	409	52.5	87	11.2	16	2.1
COVE	15	2	13.3	9	60.0	3	20.0	0	0.0
CRANSHAWS	15	1	6.7	10	66.7	3	20.0	0	0.0
DUNS	1051	358	34.1	526	50.0	144	13.7	23	2.2
ECCLES	29	2	6.9	17	58.6	7	24.1	2	6.9
EYEMOUTH	1397	580	41.5	675	48.3	124	8.9	18	1.3
FOULDEN	58	4	6.9	34	58.6	14	24.1	5	8.6
GAVINTON	79	13	16.5	40	50.6	20	25.3	4	5.1
GORDON	159	29	18.2	84	52.8	37	23.3	9	5.7
GRANTSHOUSE	38	6	15.8	20	52.6	9	23.7	2	5.3
GREENLAW	259	82	31.7	119	45.9	40	15.4	18	6.9
HUME	12	0	0.0	6	50.0	4	33.3	0	0.0
HUTTON	33	2	6.1	16	48.5	11	33.3	3	9.1
LEITHOLM	67	22	32.8	31	46.3	11	16.4	2	3.0
LENNEL	22	1	4.5	11	50.0	6	27.3	2	9.1
LONGFORMACUS	24	2	8.3	11	45.8	8	33.3	1	4.2
PAXTON	73	25	34.2	29	39.7	16	21.9	2	2.7
PRESTON	40	9	22.5	21	52.5	8	20.0	0	0.0
RESTON	124	42	33.9	54	43.5	19	15.3	6	4.8
ST ABBS	83	16	19.3	48	57.8	14	16.9	5	6.0
SWINTON	104	20	19.2	53	51.0	25	24.0	5	4.8

Car Ownership by Settlement – Ettrick & Lauderdale District

Settlements	Total Households	Households with No car		Households with 1 car		Households with 2 cars		Households with 3 or more cars	
		No	%	No	%	No	%	No	%
ASHKIRK	41	3	7.3	18	43.9	18	43.9	1	2.4
BEMERSYDE	8	0	0.0	4	50.0	3	37.5	0	0.0
BLAINSLIE	34	3	8.8	14	41.2	13	38.2	3	8.8
BOWDEN	112	17	15.2	63	56.3	29	25.9	3	2.7
CLINTMAINS	11	0	0.0	6	54.5	3	27.3	1	9.1
CLOVENFORDS	138	20	14.5	59	42.8	49	35.5	10	7.2
EARLSTON	678	216	31.9	326	48.1	102	15.0	34	5.0
EILDON	21	1	4.8	11	52.4	8	38.1	0	0.0
ETTRICK	10	0	0.0	6	60.0	2	20.0	0	0.0
ETTRICKBRIDGE	25	2	8.0	10	40.0	8	32.0	3	12.0
FOUNTAINHALL	38	9	23.7	16	42.1	8	21.1	4	10.5
GALASHIELS	5928	2391	40.3	2712	45.7	722	12.2	101	1.7
GATTONSIDE	133	12	9.0	59	44.4	54	40.6	7	5.3
HERIOT	30	3	10.0	14	46.7	7	23.3	3	10.0
LAUDER	464	108	23.3	209	45.0	129	27.8	18	3.9
LILLIESLEAF	93	11	11.8	42	45.2	33	35.5	5	5.4
MAXTON	30	2	6.7	15	50.0	9	30.0	3	10.0
MELROSE	908	204	22.5	454	50.0	202	22.2	48	5.3
MIDLEM	35	3	8.6	12	34.3	18	51.4	1	2.9
NEWTOWN	463	162	35.0	223	48.2	63	13.6	15	3.2
OXTON	56	9	16.1	23	41.1	17	30.4	6	10.7
REDPATH	21	3	14.3	10	47.6	6	28.6	1	4.8
SELKIRK	2503	936	37.4	1186	47.4	322	12.9	59	2.4
ST BOSWELLS	452	114	25.2	237	52.4	81	17.9	20	4.4
STOW	229	60	26.2	116	50.7	47	20.5	6	2.6
YARROW	18	2	11.1	8	44.4	5	27.8	2	11.1
YARROWFORD	47	4	8.5	26	55.3	15	31.9	1	2.1

Car Ownership by Settlement – Roxburgh District

Settlements	Total Households	Households with No car		Households with 1 car		Households with 2 cars		Households with 3 or more cars	
		No	%	No	%	No	%	No	%
ANCRUM	151	37	24.5	82	54.3	28	18.5	4	2.6
BEDRULE	14	1	7.1	6	42.9	5	35.7	1	7.1
BONCHESTER BR	54	6	11.1	31	57.4	14	25.9	2	3.7
CHESTERS	20	2	10.0	10	50.0	6	30.0	1	5.0
CRAILING	20	1	5.0	9	45.0	7	35.0	2	10.0
DENHOLM	270	53	19.6	134	49.6	72	26.7	11	4.1
ECKFORD	17	1	5.9	9	52.9	5	29.4	2	11.8
EDNAM	49	7	14.3	20	40.8	17	34.7	5	10.2
HAWICK	6785	3099	45.7	2949	43.5	625	9.2	111	1.6
HEITON	65	14	21.5	36	55.4	14	21.5	0	0.0
HOWNAM	7	0	0.0	4	57.1	2	28.6	0	0.0
JEDBURGH	1772	705	39.8	842	47.5	183	10.3	42	2.4
KELSO	2468	801	32.5	1242	50.3	355	14.4	70	2.8
KIRKTON	13	1	7.7	7	53.8	4	30.8	0	0.0
LANTON	30	3	10.0	13	43.3	11	36.7	1	3.3
MINTO	19	0	0.0	11	57.9	5	26.3	1	5.3
MOREBATTLE	89	11	12.4	57	64.0	16	18.0	3	3.4
NENTHORN	27	1	3.7	13	48.1	11	40.7	2	7.4
NEWCASTLETON	354	114	32.2	180	50.8	51	14.4	9	2.5
NEWMILL	11	2	18.2	4	36.4	4	36.4	0	0.0
NISBET	10	1	10.0	6	60.0	2	20.0	0	0.0
OXNAM	23	1	4.3	8	34.8	8	34.8	4	17.4
ROBERTON	15	0	0.0	7	46.7	5	33.3	1	6.7
ROXBURGH	24	1	4.2	15	62.5	5	20.8	2	8.3
SMAILHOLM	18	1	5.6	10	55.6	5	27.8	1	5.6
SPROUSTON	40	3	7.5	22	55.0	12	30.0	1	2.5
STICHILL	47	5	10.6	23	48.9	13	27.7	4	8.5
TEVIOTHEAD	8	0	0.0	4	50.0	3	37.5	0	0.0
YETHOLM	265	66	24.9	151	57.0	39	14.7	9	3.4

Car Ownership by Settlement – Tweeddale District

Settlements	Total Households	Households with No car		Households with 1 car		Households with 2 cars		Households with 3 or more cars	
		No	%	No	%	No	%	No	%
BLYTH BRIDG	36	1	2.8	18	50.0	12	33.3	4	11.1
BROUGHTON	109	19	17.4	60	55.0	24	22.0	5	4.6
CARLOPS	25	1	4.0	15	60.0	7	28.0	1	4.0
EDDLESTON	98	11	11.2	44	44.9	39	39.8	2	2.0
INNERLEITHE	1107	409	36.9	498	45.0	174	15.7	25	2.3
PEEBLES	3051	1162	38.1	1378	45.2	450	14.7	60	2.0
ROMANNO BRI	26	0	0.0	10	38.5	12	46.2	3	11.5
SKIRLING	44	8	18.2	17	38.6	15	34.1	3	6.8
TRAQUAIR	16	2	12.5	7	43.8	5	31.3	1	6.3
WALKERBURN	323	142	44.0	138	42.7	37	11.5	6	1.9
WESTLINTON	446	77	17.3	174	39.0	163	36.5	32	7.2

SOURCE: BORDERS REGIONAL COUNCIL.

APPENDIX G.

PHOTOGRAPHS.

PLATE 1.INVERNESS BUS STATION:A FOCAL POINT FOR BUS ROUTES IN THE HIGHLAND REGION.

PLATE 2.SERVICE BUS ALONGSIDE POSTBUS(FORD SIERRA CAR) AT GORTHLECK(S.W.OF INVERNESS).

PLATE 3.PORTREE BUS STATION,ISLE OF SKYE.

PLATE 4.FORT WILLIAM TO INVERNESS SERVICE BUS AT FORT AUGUSTUS.

RAIL TERMINALS ON THE WEST HIGHLAND LINES.

PLATE 5.KYLE OF LOCHALSH.

PLATE 6.MALLAIG.

PLATE 7.FORT WILLIAM STATION WITH STEAM HAULED TRAIN BOUND FOR MALLAIG.

PLATE 8.INVERNESS STATION: A NODAL POINT IN THE RAIL NETWORK OF THE HIGHLAND REGION.

PLATE 9.NAIRN STATION:AN INTERMEDIATE STOPPING POINT ON THE INVERNESS TO ABERDEEN LINE.

PLATE 10.ACHNASHEEN ON THE INVERNESS TO KYLE LINE AND TERMINUS OF THE POSTBUS SERVICE FROM GAIRLOCH.

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PLATE 15.POSTBUS LOADING MAIL AT GAIRLOCH.

PLATE 16.POSTBUS(FORD SIERRA CAR) AT STRATHPEFFER.

PLATE 17. TYPICAL 14 SEATER POSTBUS AT GAIRLOCH.

PLATE 18.POSTBUS(FOUR SEATER LANDROVER) NEAR LOCH NESS(A831).

PLATE 19.POSTBUS CROSSING LOCH LINNHE AT CORRAN FERRY (S.W.OF FORT WILLIAM).

FORT WILLIAM-GARVAN(CIRCULAR)SERVICE.

PLATE 20.POSTBUS DISEMBARKING FROM CORRAN FERRY(LOCH LINNHE).

FORT WILLIAM-GARVAN(CIRCULAR) SERVICE.

PLATE 21.POSTBUS(14 SEATER) DEPARTING FROM HAWICK BUS STATION.

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PLATE 24.BORDER COURIER BUS AT HAWICK.

PLATE 25.BORDER COURIER VEHICLE ARRIVING AT SELKIRK SQUARE.

PLATE 26.BORDER COURIER LOADING PASSENGERS AT HAWICK.

PLATE 27.BORDER COURIER VEHICLE AT BORDERS GENERAL HOSPITAL.

PLATE 28.BORDER COURIER BUSES LOADING MEDICAL SUPPLIES. (NOTE THE SECURE COMPARTMENT AT REAR OF VEHICLE).

PLATE 29.ETTRICK AND YARROW COMMUNITY BUS WAITING FOR PASSENGERS AT SELKIRK SQUARE.

PLATE 30.COMMUNITY BUS STANDING ALONGSIDE CONVENTIONAL BUS AT SELKIRK SQUARE.

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