

# **The potential of railway re-openings as a solution to transport and access problems in national parks**

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in International Transport with honours.

Signed ..... Date .....

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## Note

Abbreviations are only used where a recognised standard abbreviation already exists, such as SRA (Strategic Rail Authority). Abbreviations such as NP for National Park, which are not widely found elsewhere, are not used.

The author takes some examples from areas that are not national parks, but where circumstances are sufficiently similar as to illustrate a point.

In common with previous dissertations, I have experienced some difficulties with various computer software, and would like to abdicate responsibility for any errors caused by its inadequacies.

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## **Abstract**

The transport needs of national parks are unique. Although essentially rural, they attract millions of visitors a year who go there to enjoy their special qualities. The vast majority of these go by car, and this is placing an increasing strain on the limited transport capacities of these areas, as well as causing pollution and further excluding those not fortunate enough to have access to a car. Therefore, the issue of providing new capacity for journeys into these areas needs to be looked at, and the disused track beds of railways closed in the 1960s and '70s could provide a solution.

This dissertation is intended to provide an overview of the issues to be considered and the context in which a potential railway re-opening in a national park might be looked at and appraised in further detail. It is not an exhaustive study, as this is not considered a reasonable aspiration for an undergraduate dissertation.

The main aim of the study is to put the subject of railway re-openings in national parks into context, establishing what place they occupy in the public transport landscape in these areas, and establishing exactly what needs a new line would serve.

## **Chapter 1 Transport-related problems in national parks**

### 1.1 Introduction

This chapter is concerned with identifying, quantifying, and qualifying the factors which create the need for modified or improved public transport in national parks, and the needs improved public transport would serve. The problems discussed are based loosely on the criteria outlined by Speakman (2000). This is a wide berth, but allows the subject to be considered 'in the round' as this is what those responsible for provision of transport in national parks must do, and much of the work on the subject is going in this direction.

The transport problem in national parks, as well as many of the other problems national parks currently face are illustrated by an apparent contradiction in the National Parks and Access to the Countryside Act (1949) legislation that created national parks in the UK. The statutory purposes set out for designated areas are as follows:

- "to conserve and enhance the natural beauty, wildlife, and cultural heritage of the national parks, and
- to promote opportunities for the understanding and enjoyment of their special qualities by the public."

In practise this creates a conflict between the promotion of national parks as places for those from outside to visit, and the problems that large numbers of visitors cause.

During the 1990s there was added to these purposes a duty:

- to foster the economic and social well being of local communities within the National Park.

The inclusion of this duty bestows a responsibility on national park authorities to consider economic and social factors in their planning, and therefore should have some impact on the provision of transport.

The author considers that the above purposes serve as the primary aims of any improvements to public transport in national parks, and not the ulterior motives of other parties, including those which may exist among those responsible for managing the national parks. The reconciling of the three statutory aims stated implies a need for sustainability.

A definition often given of sustainable development, stemming from the 1987 Bruntland Report and the 1992 Earth Summit in Rio de Janeiro is that:

“sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

(Lake District National Park Management Plan, 1998).

It is recognised that while economic development and social well being is an important need, this must be reconciled with environmental protection.

The ‘understanding and enjoyment’ of the ‘special qualities’ of National Parks implies a particular kind of recreational use to be promoted. The phrase often used to

describe this is 'quiet enjoyment' (a phrase that was to be added to amendments to the national parks legislation, although it was decided that this phrase could not be used as it already had a meaning in property law). This concept is useful to keep in mind when considering the sort of promotion of enjoyment that public transport must be part of, catering for walkers, cyclists, educational activities/visits, and those wishing to enjoy the peace and quiet which they are perhaps not accustomed to in their everyday lives. Public transport can serve these needs in two ways. Firstly, they can divert people from private transport, with a net positive effect on the atmosphere in the Parks. Secondly, steps can be taken to tailor public transport in these areas to its purpose e.g. by catering for bicycles.

## 1.2 Road traffic congestion & the private car

It is sometimes difficult to gauge the seriousness of the congestion problem. The problem is not uniform across national parks, and congestion levels will have significant peaks of severity, even within the summer season, such as on Bank holidays in locations such as Dovedale (Peak District) or Windermere (Lake District) (Owen 7/3/2001). Not every National Park has these kinds of visitor levels, and suffers to this extent. For example, Leo Markham of the Brecon Beacons National Park authority observes that the Brecon Beacons National Park does not suffer traffic problems. However, road traffic is increasing faster on rural roads than on other roads (Countryside Agency 2000). Car ownership is by necessity higher in rural areas (see 1.3).



Rural areas can sometimes now experience worse air pollution than urban areas (Countryside Agency 2000), contradicting the traditional view of a less-polluted countryside.

Nash (1997) makes the distinction of some air pollutants from motor vehicles as being local pollutants, such as carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NO<sub>x</sub>), lead (if still applicable), and volatile organic compounds (VOCs). Others are in connection with acid rain (as is NO<sub>x</sub>), and CO<sub>2</sub> concerning global warming. Views will vary on whether any of these are more important to reduce than others, but it is likely that the first priority of a national park authority will be those pollutants with the most localised and tangible effects.

The Countryside Agency (2000) highlights pollution causing ecological damage in rural areas. It states that ground-level ozone is, in general, in greater concentrations than in urban areas. Levels are above those critical for natural vegetation and arable crops. Levels of sulphur emissions, although much reduced, will reach critical loads for acidification across the Pennines and Cumbria by 2010. In upland areas, concentrations of nitrogen are above those levels critical for heathland vegetation, and the recovery of damaged ecosystems may take decades.

The term 'suburbanisation' (Speakman, 7/11/00) refers to a phenomenon that occurs when roads in national parks are used to the extent that work is carried out to widen, provide pavements, and upgrade roads to the point where they resemble their urban and suburban counterparts. Some park visitors will not see this as a problem, but the 'special', aesthetic qualities of national parks will inevitably be affected. Where there

is the risk of eroding the special qualities that bring people to national parks in the first place, this effect should be limited in some way. Continuous upgrading of roads to meet demand is not sustainable if the national park is to retain its special qualities.

### 1.3 Social Exclusion

Social exclusion describes any situation where people are not able to participate in civil, social, economic, and cultural activities that most others take for granted. This exclusion may be related to low income, poverty, education, employment, health, housing, access to services, relationships within families and within the wider community (Countryside Agency 2000). Transport is not in a position to assist with all these ills, but for some of the socially excluded, improved access to transport can represent real improvements in quality of life.

Around 13 million people in the UK, just under a third of households in Britain do not own a car (DETR, 1998). Of those households that do, it is typically the case that not all members will have regular access to the car, and some, even those of working age, will be too young to drive. If public transport is poor, this can lead to social exclusion and a degree of hardship. In poorly served areas, families may be forced to make substantial financial sacrifices in order to keep a car going. The DETR (1998) accepts that being unable to afford transport can limit access to jobs, training, education, and shopping choice. The increased centralisation of facilities such as shops, banking facilities, and schooling have had an adverse affect on the poorest sections of rural society. Low-income groups such as students, the unemployed, and the elderly are among those affected. The socially excluded in rural areas tend to be

geographically dispersed, in contrast to the more concentrated situation in urban areas (Countryside Agency 2000).

Many of the national parks in England and Wales are in close proximity to major urban conurbations, yet these areas are under-represented in the numbers visiting national parks. Although the national parks were conceived in the 1930s as a means of recreation for the ordinary working people of Britain's industrial towns and cities, evidence has shown them, in this day and age, to be a predominantly middle class facility (Owen 7/3/01). There are considerable barriers for those in inner cities to take advantage of national parks. These include barriers of information and education, and cost barriers. For example, to go hiking requires walking boots, protective clothing, maps (and the ability to use them), in addition to the cost of travelling.

So there are two aspects to the social exclusion problem that might be solved by improved public transport within and to and from national parks. Firstly, there are those living in rural areas who are socially excluded through lack of access to a car, and therefore lack of potential access to employment, shopping facilities, education, and social activities. Secondly, a lack of access for recreation to those from outside who again have no access to private transport, although it is clear that their problems do not end there.

The particular characteristics of national parks, with large numbers of visitors and seasonal peak and off-peak mark them out from other rural areas, and suggest the need for a unique way of looking at transport in these areas.

## **Chapter 2 Existing solutions**

### 2.1 Characteristics of Public Transport Use

This chapter examines the solutions employed in recent times in national parks. This includes an examination of the use of buses and rail, as well as bringing in examples of foreign practice for comparison. The aim is to look at where current strategies have been successful, and what the shortcomings are. To begin with, it is useful to look at some characteristics of public transport use, and what determines modal choice.

Owen *et al* (1999) provide a useful framework in their Northern Snowdonia Study of three options for encouraging motorists to switch to public transport:

- Option 1:

Visitors persuaded to leave their cars at home, using public transport for their entire journey

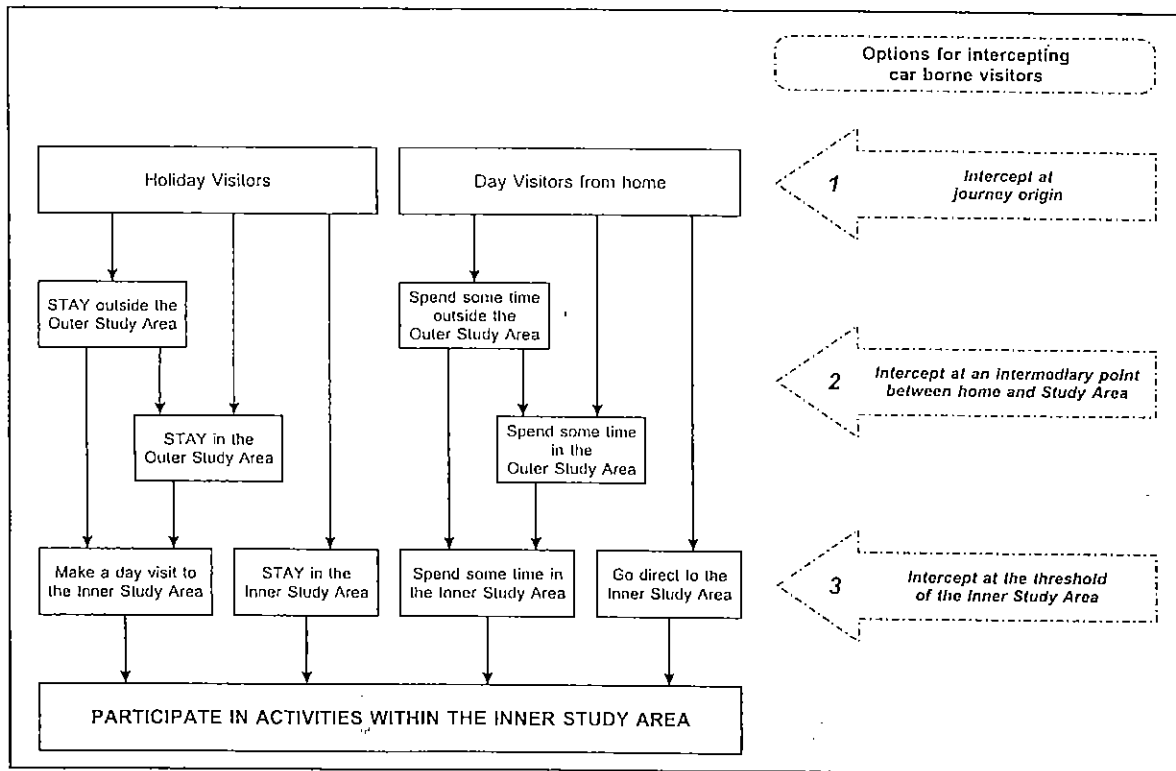
- Option 2:

Visitors intercepted at a gateway between their home and the national park

- Option 3:

Visitors intercepted at the threshold of the popular area of the national park.

This is represented in more detail in figure 2.1.



**Fig 2.1 Interception points for modal shift**  
**Source: Northern Snowdonia Study**

This shows that there needs to be consideration of whether visitors are holiday or day visitors, and whether they are spending all or part of their time in the national park. Other considerations might be whether visitors are first-time visitors or whether they are regular visitors that know the area. In comparing the three options stated, advantages, disadvantages, and the potential mechanisms required for each option are discussed, and are shown in full in Appendix A.

To summarise the points related to the issues of the first chapter, the advantages of Option 1 are that it is the most sustainable situation, with environmental and economic benefits accruing not just to the destination area, but also to originating and intermediate areas also. Disadvantages are that it is the most difficult to achieve in the short term, is not suitable for all types of visitor, may be seen as a loss of a

driver's freedom, and has potentially adverse affects on areas less accessible by public transport.

Option 2 has the advantages of reducing car use between origin and destination, and taking advantage of existing public transport. This option will have most appeal to holiday visitors, many of whom actually stay outside the main visitor areas (Owen 7/3/01). Disadvantages are that this option requires good integrated public transport, will often incur longer journey times, and may be the hardest option to achieve because of 'complexity of connections'.

Option 3, which is essentially the park & ride option, is potentially the most effective in achieving modal shift within the central area, as it is the easiest to persuade visitors to use. Disadvantages are that this option does nothing to reduce car dependency outside of the area for which park & ride is provided, and it requires expansion of parking space (land take and expense) and traffic management measures.

Modal shift requires not only existence of public transport, but awareness that choices are available. Often referred to as 'carrot and stick', a combination of incentives and disincentives will shape these choices. It is important, in deciding what form these 'carrots' and 'sticks' should take, to evaluate what effect a measure will have, and how choices are made, and relate these to each other in their entirety. Crabtree (2000) suggests a system dynamics model. Such a model is currently under development at the University of Northumbria relating to modal choice of visitors to

the North York Moors National Park. Table 2.1 indicates what the model might consist of.

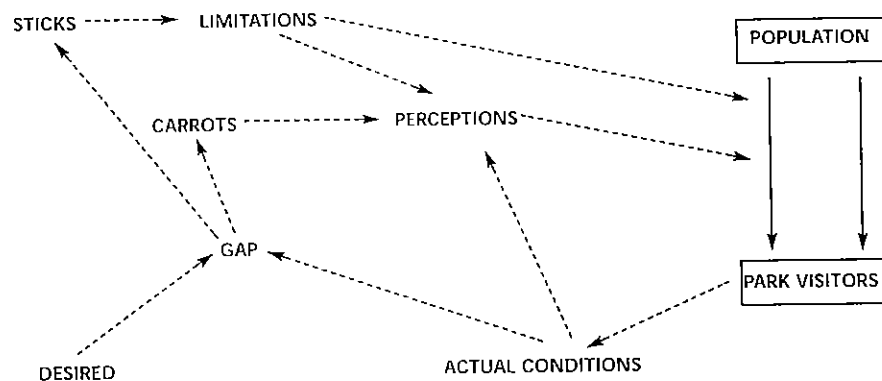
Stocks	Flows	Converters (other influences on flows)
Population - Visitors	Park Entry Rate	Climate (Weather, Day of Week, Season)
Day Visitors - Typology	Rate of Car Freaks	Attitudes (Public Transport, Environment)
Typology - Car User	Car User Rate	Congestion (Road Capacity, Car Park Spaces)
		Sticks (Road Tolls, Increased Car Park Prices)
Typology - Bus User	Bus User Rate	Decision Factors (Awareness, Convenience)
		Carrots (Increase in Bus Services*, Reduced Fares)

**Table 2.1 Example of Variables in a System Dynamics Model**

**Source: Crabtree (2000)**

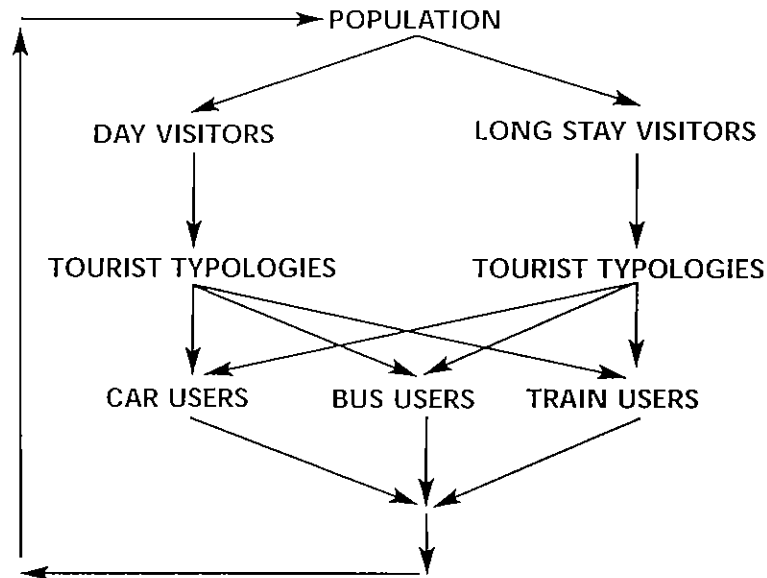
\*or other public transport (Author).

Figure 2.2 shows the interaction of these variables, and the influence of policy. The 'gap' is the point at which a 'carrot' or 'stick' is required. As an example, Crabtree (2000) cites the difference between the 'desired' number of cars entering a national park, and the 'actual' number of cars as being a 'gap'. The nature of the 'gap' indicates the type of measure required. Figure 2.3 shows the stocks.



**Fig. 2.2 Policy influences on National Park visitors**

**Source: Crabtree (2000)**



**Fig. 2.3 Representation of stocks**  
**Source: Crabtree (2000)**

## 2.2 The use of buses

The ability of buses to play a serious role in reducing road traffic nationally is seriously questioned. There is some doubt about the suitability of the mode to effect modal shift. This is perhaps evidenced in a shift in government transport policy from the 1997 White Paper, now favouring light rail schemes where improved bus services were previously considered sufficient for urban transport needs. However, in some instances, a degree of success has been achieved through the effective use of buses.

The 'Moorsbus' network in the North York Moors National Park is an example of a bus network, combining park & ride facilities with direct access from surrounding urban areas. It is estimated that almost 355,000 car miles per year were saved by Moorsbus in 2000 (Breakell 7/11/00). In 1996 it was found that 48% of users had



access to a car but had chosen to use the bus (Council for National Parks, 1997). Demand was so high that duplicate services had to be operated.

The Moorsbus was started in the early 1980s with the aim of tackling the social exclusion agenda by providing access from York and Teeside for those without a car (Breakell 1999). By the mid-1990s, traffic issues were prominent in the planning of public transport in the area, and a network was by this stage being developed to deal with this. Buses from outside interchanged with smaller buses travelling to various places of interest in the Park. Marketing became increasingly important. A network map was produced similar in principle to that of the London Underground, and information leaflets explained to potential users exactly what Moorsbus was. Drivers were given information packs and trained in being courteous and helpful to customers, driver attitude often being a major criticism of bus users. A further part of the marketing drive has been the link-ups with local attractions, and even local pubs, cafes, and restaurants, all offering discounts to Moorsbus users. Tickets are sold on a 'freedom to roam' basis, with a ticket for the central area costing £2.50, and tickets from outside points costing £5. There are now also multi-modal tickets including the North York Moors Railway and the Esk Valley line.

An advantage of a network such as this is that it gives walkers and cyclists the option of walking or cycling from one point to another, rather than having to walk back to the car. In this case, public transport creates a genuine choice to a group of potential users.

Public transport networks such as Moorsbus are flexible enough to cater for many types of need, and are able to 'intercept' motorists from their cars at various points between origin and destination, providing choice for potential users.

Innovation can play an important role, such as in the Brecon Beacons National Park, where weekend bus services into the park from urban areas include a trailer for transporting bicycles. However, innovation and change should not occur too often, as too much radical change can be bewildering for potential users. Moorsbus has built up its network gradually over time.

As seen with rail in 2.3, public transport can sometimes benefit from being seen as a novelty ride that is 'fun' to use. An example of this is the open-top bus service in the South Downs Area of Outstanding Natural Beauty (AONB). An AONB is a step down from being a full-scale national park, and the South Downs may become a national park in the near future. The bus runs from Brighton Pier, and 79% of passengers questioned said that they used the service because it was an open-top bus. 26% of these passengers were using it as an alternative to the car (7/11/00). There is perhaps an indication here that public transport may benefit from being seen as 'fun', rather than the more sterile public transport services found in towns and cities. This is backed up by Paul Salveson (7/11/00) who says that an important feature of attracting people to public transport is that it should be 'fun'.

## 2.3 The role of existing railways

Existing railway lines in national parks can be placed under two broad groupings:

- Sections of the national rail network
- Heritage lines

This section begins by considering the former.

In a survey of four rural railway lines, Salveson (1997) outlines some of the reasons given for using rail:

- “many respondents said they simply ‘liked trains’, or that their children did.”
- attractive fares/fare structure, where this exists
- comfort and relaxation
- lack of access to a car (did not own a car/didn’t drive/car was in use elsewhere)

31% of respondents used rail even though a car was available to them. A small percentage (not specified) said they used the train because they had no alternative.

It seems clear that, although there are often fairly obvious reasons for choosing rail (e.g. improved journey times), for other reasons many people perceive rail to be of superior quality to bus services, although it is difficult to quantify this in a precise manner. The reasons could be quite subtle, such as greater legroom and freedom to move about, level accessibility via platforms, and perceived or actual better reliability of service. The physical existence of a railway line may make it a more trusted form of public transport than the bus, which is more transient, and more subject to changes in a relatively short time scale. It may also be legitimate to suggest that

people find it easier to access information about rail services. The government's setting up of Traveline (Transit Feb 2nd 2001), a national public transport enquiry service first proposed in the 1997 White Paper, indicates a need that is not currently being met. Lesley (1997) observes that there are 'few examples around the world where car commuters have been successfully diverted to bus systems'.

Rail's contribution to issues of social exclusion appears significant. The survey noted that 'overall, about 15% of passengers would have stayed at home if the four lines did not exist'. 1.5% said they used the train for environmental reasons. This is backed up by the findings of Hillman & Whalley (1980).

There are some significant examples of national parks already served by the national network. These can be divided into two groups:

- Branch routes into national parks

An example is the Windermere branch in the Lake District National Park.

- Routes passing through National Parks

An example here is the 'Hope Valley' line between Sheffield and Manchester.

These routes will frequently be inter-urban, such as Leeds-Settle-Carlisle, which passes through the Yorkshire Dales National Park, or the Hope valley line between Manchester and Sheffield, which is substantially within the boundaries of the Peak District National Park.

The through routes have a function beyond the remit of serving the national park and the communities therein. Proposed railway re-openings can also fall into these categories, and instances of that are described in the next chapter (3.1).

In recent years many rural lines have benefited from improved local community support, often in the form of Community Rail Partnerships. One example of this approach is the Esk Valley line, which runs from Middlesbrough to Whitby, passing through the North York Moors National Park. This has allowed the line to be better promoted. As a result this line achieved a 30% increase in usage between 1997 and 1998 (Platform, Issue No 1, April 2000). A recent bid for RPP funding (see 3.3) will allow the introduction of a Sunday service on the line throughout the year. The aim eventually is to provide more than the service of four trains per day in each direction inherited by British Rail (BR) (Nick Buxton 7/11/00). In discussing Community Rail Partnerships, Paul Salveson describes the lines where these are employed as 'underused assets', and that this is a way of better utilising these assets rather than simply guarding against the potential threat of closure, as might have been the case in the past.

A further possibility for rural lines is micro-franchising (Salveson 2000). The Esk Valley line is an example of where this is being considered. There are two main reasons for this. The first is that a micro-franchise would allow train services to be better tailored to the needs of the locality, becoming the main part of the business rather than a very minor part of a regional franchise such as Northern spirit. The second reason is related to the first, and is commercial. At present, lines such as the Esk Valley Line use up a disproportionate amount of management time in relation to revenue. It is thought that the most likely form this could take is as a sub-contracted franchise from the main regional franchise. This would allow the line to benefit from some of the cost advantages of being attached to a larger organisation, while also

benefiting from the more local management and market focus that such an arrangement would provide. Locally managed railways are discussed further in 2.4.

The role of heritage railways is debatable. These are lines that owe their existence to the efforts of enthusiasts, and are set up primarily as recreational facilities rather than as public transport facilities. Hillman & Whalley (1980) include in their study the Dart Valley line in Devon, which was purchased from BR with the intention of maintaining the regular train services that had been withdrawn. Within a couple of years the group decided that this was not economically viable, and turned their attention instead to the heritage market. The railway is now a highly successful commercial enterprise, but contributes little to the public transport needs of the area. Therefore, by their very nature, and often due to their very success (see 3.2), preserved railways can be of very limited use as a means of providing useful public transport, and many heritage lines are a significant source of road traffic generation in their own right.

A highly contentious debate has surrounded efforts to revive the narrow gauge Welsh Highland Railway in the Snowdonia National Park. The Snowdonia National Park Authority objected to the reconstruction of the railway for a number of reasons. These included objections to the loss of railway footpaths, chiefly the Aberglaslyn pass. This footpath is difficult to divert, and the replacement may not be suitable for all users (e.g. the disabled). Therefore, the Welsh Highland is perhaps an example of where the railway would actually restrict access, and cause social exclusion of a certain kind.

The park authority was also very wary of the railway becoming a 'linear theme park': an attraction that visitors would actually drive into the national park to use, and therefore increasing congestion rather than reducing it. In order to satisfy the public inquiry, the two organisations involved have had to make provisions to minimise the impact of the railway and, moreover, to make it suitable as a park & ride facility. It is not envisaged that the majority of passengers will travel the entire length of the combined route from Caernarfon to Blana Ffestiniog via Porthmadog. Instead, they envisage three main traffic flows from nodal points where people will be able to leave their cars.

Railways have, in some instances, proved very successful in providing park & ride facilities. A notable example of this is the Swanage railway in Dorset, which is a private heritage steam line. Under an agreement with the council, the railway provides a service from a park & ride station at Norden for those wishing to go on to Corfe Castle, a historic town which suffers from considerable road traffic congestion in the seasonal peak. Under the agreement, the council provides the car parking in return for a share of revenue from the railway. The operation has been extremely successful, and at the time of writing work is planned to double the size of the existing car park at Norden. In this instance it has been shown that visitors are prepared to use park & ride for this very short distance. Perhaps, in this case, park & ride is made attractive by the novelty value. The ride is part of the visitor's 'day out' rather than a trial or chore. Users may not actually think of it as being 'park & ride' as such.

## 2.4 Examples of foreign practice

This chapter cites examples of practice in foreign national parks in response to some of the issues highlighted in chapter 1, and a look at the organisation of transport in areas that, while not necessarily national parks, exhibit some inherent similarities.

In studying national parks abroad, it should be remembered that, while many of the problems are of a very similar nature to those in the UK, foreign national parks differ with regard to their statutory position, in issues such as land ownership, and in general characteristics e.g. size. For example, national parks in Africa and America are more likely to be a means of preserving a wilderness in its near-natural state. In some areas there is no access for road traffic to begin with e.g. the Denali National Park, Alaska, where access to some areas is by rail only (Trains February 2001). Germany and the USA are taken as examples for several reasons. Firstly, both countries have similar levels of car ownership and dependency to the UK, and both experience problems related to traffic congestion and pollution in national parks. As a Western European country, Germany's situation is closer to that in the UK in terms of population density and the size of the parks involved, but the American examples are also noteworthy in showing the willingness of an extremely car-dependent nation to consider alternatives.

Germany's Bayerische Wald (Bavarian Forest) National Park is situated in the south east corner of the country along the border with the Czech republic, and the adjoining Sumava National Park. In 1993, in response to ever-increasing levels of traffic, it was decided to close a section of road to general traffic, with the provision of battery



electric-powered buses that were jointly funded by the national park and the bus's manufacturer. Public acceptance of the scheme has been high, with 90% of those asked in favour, and 88% believing that it enhanced the area's recreational value. Visitor numbers remained at similar levels to before (Holding, Global Transport Spring 1997). For comparison, a scheme proposed by Dartmoor National Park Authority in 1994 for a road closure scheme around the Burrator reservoir did not go ahead after the proposals received widespread objections from the local community. The June 1996 report to the Park Committee stated that:

“the intended advantages of a car free environment, better opportunities and better access by bus and bicycle were not perceived by most as being real advantages ... the volume and hostility of the opposition came as a complete surprise.”

(Council for National Parks 1997)

Of relevance to the operation of railways in National Parks, and how this might be better suited to the needs of these areas, is the issue of private or locally managed railways. Germany, as well as Switzerland and Sweden have many examples of these, and Austria and the Netherlands are also expanding the number local lines run privately. One such local network is that operated by the DürenerKreisBahn (DKB), which consists of two lines radiating from Düren in North West Germany. Under the previous management of the German state railway Deutsche Bahn (DB), the lines had a single return service a day for schoolchildren. DKB was already established as a local bus company and, after acquiring the lines, increased services to hourly on one of the lines, and half-hourly on the other. In 1997 the line was carrying 3000 passengers per day, and this was set to rise. Although not in a national park, the southern terminus of the DKB system at Heimbach is a popular weekend destination

for visitors from the nearby cities of Aachen and Köln. Sunday loadings can be as high as 2000, and the DKB has targeted car-owning visitors (Holding, Global Transport Spring 1997). This is a good example of local marketing on a locally focused system. Discussions of micro-franchising in the UK (2.2) have recognised the advantages this has had.

The DKB uses modern lightweight 'RegioSprinter' diesel railcars to provide the service, and these have the chief advantage of reduced operating costs and track wear, as well as large windows allowing good views of the surrounding countryside, and space for bicycles, making them ideally suited for their purpose. The rival 'Talent' design is based on much the same principle.

This model has been very influential on the plans of the Wensleydale Railway Company, who already run bus services in the local area, and are considering acquiring RegioSprinter units for services between Northallerton and Garsdale. However, platform heights and other loading gauge differences would need to be reconciled if this were to happen. At present, no design of this kind, geared specifically to the needs of rural lines, has been offered by train builders to the UK market.

In the USA, changes are afoot to transport arrangements in the Grand Canyon National Park. Due to the pressures of ever-increasing traffic, private cars are being banned from the South Rim. Park & ride facilities will be provided 8 miles from the Canyon, at Tusayan. Electric buses or a light railway will then transport visitors to an interchange at Mather Point, where further buses will travel along the East and West

Rims. Funding comes from increases in charges to commercial organisations operating inside the park ([www.americansouthwest.net](http://www.americansouthwest.net)). Therefore the immense popularity of this national park is both the cause of the problem, but also a significant aid to the solution.

The Grand Canyon Railway meanwhile is a 64-mile line which, having been closed for twenty years, reopened in the early 1990s as a steam railway (Trains February 2001). This line gives visitors the opportunity to avoid the traffic and parking problems at the South Rim, and has been very successful in doing this, effectively emulating the Swanage model, albeit on a much larger scale. There is also the opportunity for passengers from cross-country mainline trains to connect into the service. The park terminus of the line has hotels and is conveniently sited for exploring the South Rim on foot.

### **Chapter 3 Possible future solutions: The role of railway re-openings**

#### **3.1 Railway re-openings: The outline case**

This chapter looks at one of the more radical possibilities for future improvements to public transport in national parks: the role that re-opening disused railway lines could play, looking at issues of feasibility, costs, benefits, and the suitability of various types of scheme. This will incorporate a study of the techniques that might be used for appraisal of such projects, such as Social Cost Benefit Analysis (SCBA). However, it is not proposed that any such techniques be in any way carried out, but that the relevance of their potential use be discussed. This chapter will incorporate evidence from other rail schemes in national parks, planned and in progress, which exist in a variety of circumstances, may differ in size and scope, and would offer different perspectives on the issues.

The outline case in favour of a new or re-opened railway in a national park may include some of the following points:

- Rail is an efficient people mover, and therefore is more environmentally sustainable than the equivalent amount of private car travel.
- Rail can, in some cases, reduce journey times.
- Rail, as 'quality' public transport, can encourage modal shift.
- Rail can reduce social exclusion for local people and visitors.
- Rail can stimulate economic growth and create employment.
- Rail can form a key part of a network of quality public transport in a national park.

As mentioned above, re-openings of railways in national parks may not be driven simply by the needs of the national park. The Matlock-Buxton re-opening, which would pass through the Peak District National Park is proposed by Railtrack as part of a strategic freight route from London to Scotland, helping to relieve high-speed trunk main lines of slow freight traffic. It is expected that the relaying of this line would also result in a return of passenger services to the route, serving the popular tourist town of Bakewell, but this will be a spin-off of a greater strategic aim.

By contrast, a re-opening such as the Penrith-Keswick line (Chapter 4) would create a railhead solely for the purpose of providing transport to and from Keswick and the surrounding area. It is worth noting that, before Railtrack's proposed reinstatement from Matlock to Buxton, Central Trains had expressed an interest in extending its Matlock trains to Bakewell by running over the metals of the Peak Rail heritage railway in exchange for access fees, should their reconstructed section reach this destination. This in isolation would then be an example of the latter, indicating that a train service serving the needs of tourists and local people alone is thought to be worth consideration by train operators, particularly if the infrastructure is already in existence. If it is not, then this clearly presents a considerable obstacle.

The cost of even a small scale re-opening can run into tens of millions of pounds. Therefore, the case has to be a strong one for funds to be committed. Once operational, such a line may or may not require an operating subsidy.

### 3.2 Technical difficulties and conflicts of interest

Since the closure of large numbers of rail routes in the 1960s, there has been no policy of retaining track beds and routes for future use. As a result, most track beds of dismantled railway lines have been sold off piecemeal, and alignments have often been built over, eliminating or prejudicing the possibility of future reconstruction. This has occurred particularly in the towns through which the railways once passed. Many viaducts have been demolished, and tunnels filled in. The Rail Property Board (RPB), which still exists as Rail Property Ltd was given the edict in the 1960s that disused railway lines and structures should be sold off as quickly as possible. This has not since been altered, although there are signs of a more sympathetic approach emerging, such as in the restoration of Chelfham viaduct on the route of the Lynton & Barnstaple railway, which Rail Property owns, and is part of another planned re-opening. As regards tunnels, a precedent exists for a railway re-opening involving the excavation of a filled in tunnel, between Nottingham and Mansfield on the Robin Hood Line (3.3). This indicates that while expense is increased considerably, this in itself should not be an obstacle if there is a good enough case for reinstatement in spite of this.

In addition to the encroachments on track beds that have already taken place, the possibility of this occurring in the future is a genuine conflict of interest. For example, in Pickering, efforts to reinstate a link from the southern terminus of the heritage North Yorkshire Moors Railway (NYMR) to Railtrack's York-Scarborough main line may be thwarted if local authorities give planning permission for a Safeway supermarket, which is proposed to be built across the alignment. Great potential is seen in the use of these sections combined as part of a through route between York

and Whitby, forming a spinal route through the middle of the North York Moors national park. No realistic alternative route exists, so the opportunity could be lost forever. North Yorkshire County Council and the North York Moors National Park Authority have stated that they wish to protect the track bed, but the decision as to whether or not to grant planning permission rests with Ryedale District Council (Rail Express March 2001).

There is still no legal obligation to protect track beds against development that might prejudice the reinstatement of a railway. It is down to the relevant local authority to decide if such a strategy is necessary. This means that while in some areas alignments are being protected, in other areas they are not. Mills & Howe (2000):

'In general, unless the land no longer in railway use has a very high opportunity cost, there seems much to be said for retaining at least the right-of-way together with the track bed and any tunnels.'

Re-opening projects also have to overcome the problem of foot and cycle paths that have taken up residence on railway track beds, such as on the Aberglaslyn pass in Snowdonia (2.3). Many track beds have been incorporated in to the National Cycle Network, co-ordinated by Sustrans (which stands for 'Sustainable Transport'). Others have a much longer history. Officially, government policy is that these track beds should be given up if required for railway use, but in practise there will be opposition from the cycling lobby if such a move is proposed.

Existing preserved railways can also present a considerable conflict of interest to re-opening and use of their routes as useful public transport. Returning to the above

example, the reaction of the NYMR to attempts to reconstruct the link between Malton and Pickering has been cautious. The steam railway is protective of its current business of running heritage trains for the leisure market, which is commercially very successful, and understandably does not want to jeopardise this success.

During the summer months, the railway runs at capacity, and any increase in this capacity would require re-signalling and increased track capacity through double tracking of sections of the single track route, bringing a new level of operational complexity, costs, and hence, risk, to the current operation. The possibility of a conventional train service as far as Pickering is talked about, and this may have considerable benefits. However, the ability to take visitors, including walkers and cyclists rather than simply pleasure riders, from York, and perhaps further afield, right into the heart of the National Park without changing trains would not be realised.

Due to high capital costs, many see railway re-openings as inherently prohibitive. National park authorities may feel their money is better spent on less costly options, such as bus services, which can be delivered in a shorter time scale.

### 3.3 Potential sources of funding

The Robin Hood Line was one of the most significant re-opening schemes of the 1990s, reconnecting Mansfield, at the time the largest town in the UK without a railway station, to Nottingham, and later Worksop. Funding for the scheme came from a number of sources. These included:



- European Community (EC, now EU)
- Central government
- Local district councils
- Two county councils (Derbyshire and Nottinghamshire)

Other options for funding might include:

- National Lottery
- Strategic Rail Authority

The National Lottery has frequently been mentioned as a means of potential funding for railways. More than one fund exists, including the Heritage Lottery fund and in the recent past, the Millenium fund. Details of how these funds have been handled are highlighted in the Case Study (4.4). Rail re-opening schemes in general have not fared well in attracting lottery funding.

In recent times an additional source of potential funding has emerged. The Rail Passenger Partnership (RPP) Fund was set up in 1999 and is managed by what is now the Strategic Rail Authority (SRA). The aim of this fund is to assist in the funding of improvements to local and regional rail services that would not otherwise be financially viable, but contribute towards improved services, facilities, and interchange with other forms of transport. The scheme should make available £105 million over three years.

The 'RPP – Bidding Guidance' ([www.sra.gov.uk](http://www.sra.gov.uk)) say that payments will be made to Train Operating Companies (TOCs) operators as revenue support. Funds can be

used for capital projects, but it is expected that capital grants will not be made through this scheme. RPP envisages significant financial contributions from other parties, and an element of risk retained by the private sector.

In section 5.1 of the guidelines, 'consortia promoting public transport projects' are one of the examples given of potential bidders for funds. Others are Passenger Transport Executives/Authorities (PTE/As), local authorities, and private companies/TOCs. The support, or at the very least, agreement of a TOC is, it says, essential. Therefore, the implications of the fund for railway re-opening schemes in national parks need to be looked at case by case.

For example, could the Wensleydale Railway Company make use of RPP funding? In this case, the initial section to be reopened is already in place, so the fund would not initially be required for provision of track. It could be of considerable benefit in the funding of station facilities, start-up costs for the train service, and revenue support for the railway, all legitimate uses of funds according to the SRA guidelines. However, the Wensleydale Railway Company plans to run its own trains, and so to qualify for RPP funding would need to be a TOC, in accordance with the statutory position under the 1993 Railways Act (RPP – Bidding Guidance, 5.1). A possible exception is cited in 4.4.

For its plans to join the national network, the Swanage Railway has ruled out the possibility of becoming a TOC, citing the prohibitive cost of legal work and rolling stock improvement or procurement (Railway World March 2001).

### 3.4 Social case: The role of SCBA

In dealing with a railway re-opening, it is typical to find a project that is proposed by 'enthusiasts' (those with a strong preference for railway development against that of other modes), and opposed by 'sceptics' (those that do not believe rail reinstatement is practical, achievable, or would be of benefit). A third party of note are the various NIMBY (Not In MY Back Yard) objectors. The views of all these parties may have some justification, but, on that basis, it is difficult to look at the situation scientifically. That is why it is important to introduce some form of rationality into the decision-making process, and this is what SCBA is designed to do.

SCBA extends beyond simple market economics, and is employed to appraise projects or services that do not cover their costs commercially, taking into account all relevant externalities, positive or negative, and assigning them a monetary value. With the substantial capital costs involved, railway reconstruction falls into this category. A decision will not be made solely on the basis of the outcome of a SCBA, but it will provide an indicator as to whether a project should go ahead, be financially supported, and, if the project is beneficial, the extent and value of the benefits. There is no attempt here to in any way perform SCBA or indicate what the outcome might be. This would serve little use here. The aim is to show how it could be used, and what might be included.

The framework for a SCBA would be as follows:

- Identify project to be appraised

- Define clearly objectives, as these define benefits
- Quantify all costs whether private, social, or environmental
- Quantify all benefits, including environmental benefits, value of life etc.
- Decision on discounting of future costs and benefits
- Ranking of projects in terms of marginal net benefit
- Possible sensitivity analysis where uncertainties exist about future costs or benefits

(Patel 2001)

On completion of these stages, one should be able to calculate a Net Present Value (NPV) for the project, which will provide an indicator as to whether the project should go ahead. Put another way, if it is shown that the measure makes some better off without making others worse off, or adequately compensating those made worse off, then there is a Pareto improvement and the project should, on the basis of the study, go ahead.

The following list of possible costs and benefits is based on that found in Cole (1998 pp.258-259) in the example of a SCBA for a railway closure, and the costs of providing a replacement bus service. It is modified to show what costs and benefits might be taken into account in the case of a re-opening.

#### 1. Capital cost (-)

Provision of infrastructure/construction costs (permanent way, stations, bridges, tunnels, signalling etc.)

Rolling stock

Depreciation of assets

2. Operating cost (-)
  - Labour
  - Fuel
  - Maintenance
3. Journey time reductions (+)
  - Where train journey is quicker than by bus
4. Journeys made that would not otherwise have been made (+)
  - Gain in mobility by individuals
  - Greater access to centralised public services and commercial facilities
5. Decreased car operating costs (+)
  - from journeys transferred to rail
6. Decreased congestion costs (+)
  - from decreased road passenger and freight flows
7. Decreased accident costs (+)
  - from decreased road traffic flows (+)
8. Reduced road maintenance costs (+)
9. Farebox income to train operator (+)
10. Track access income (+)
  - to Railtrack or private infrastructure owner
  - from passenger or freight trains
11. Loss of revenue to adjacent bus service (-)
12. Loss of land required for the railway (-)
  - Foot/cycle path loss
  - Farmland (or other productive land)
13. Environmental benefits (+)
14. Direct employment gains (+)
  - Railway jobs
  - Jobs at local contractors
15. Indirect employment gains (+)
16. Gains in property values (+)

17. Efficiency gains for existing businesses (+)

18. Retention of employment that would otherwise have left (+)

19. Improved functionality of labour market (+)

Increased participation rates, particularly in the female and part-time sectors

20. Improved investor confidence in area (+)

Businesses more willing to locate

21. Savings in other regeneration expenditure (+)

which might have been required had rail not been invested in.

(Points 16-21 extracted from those made in Bunn 1996)

There is room for debate in deciding what should be included. Commentators such as John Whitelegg (1997) have criticised the approach to CBA used by the then Department of Transport in assessing road schemes. CBA is capable of being manipulated through the inclusion or non-inclusion of certain externalities, and its use differs between countries. Therefore, the issue of what would be included is of paramount importance to the integrity of the results.

As well as considering the externalities to include, there is also the issue of whether SCBA should encompass comparisons with other modes, as Howe & Mills (1998) suggest. A major criticism of the use of CBA has been that it tended to incorporate an inherent bias towards road transport, and, in the case of road building, the scheme it was appraising.

So a SCBA for a new railway would adopt a number of forms:

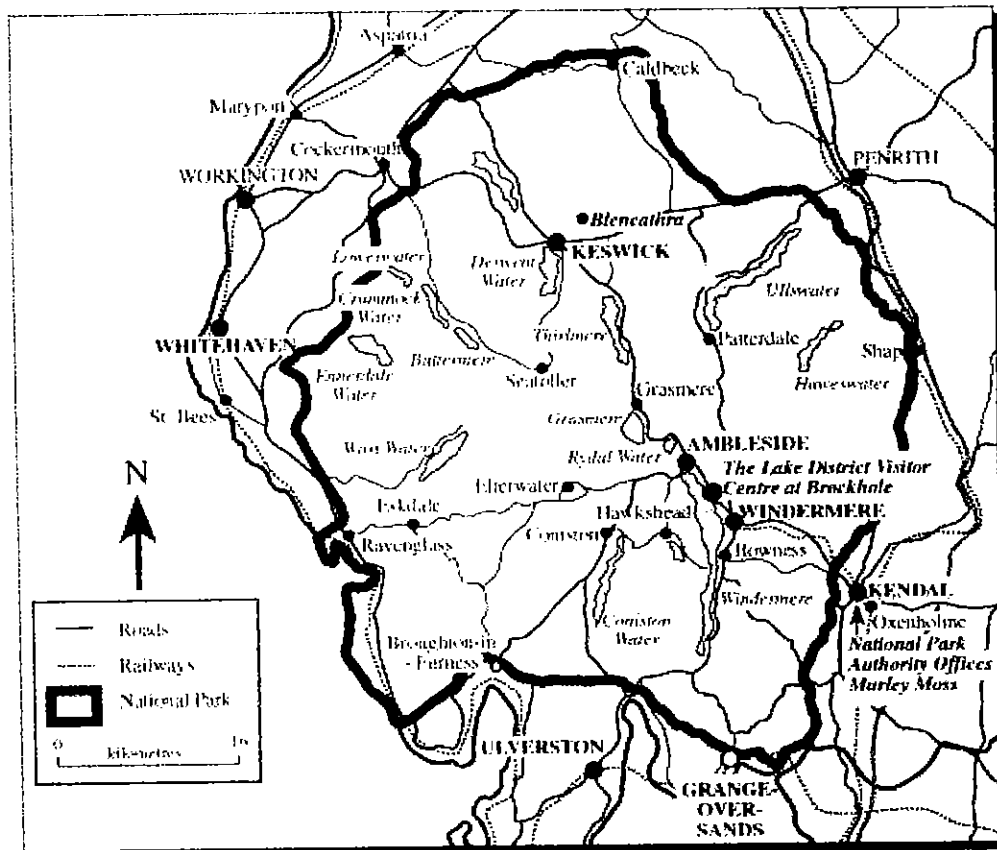
- a study into whether or not to proceed with a railway re-opening.

- a study that compares the relative costs and benefits across the modes of various measures, perhaps comparing rail, bus, road expansion, or traffic restriction.
- A study measuring the effectiveness of a scheme already undertaken, such as that for the London Underground Victoria Line.

In terms of project life span, the long-term value of transport projects in national parks may compare very favourably with urban infrastructure projects. For example, while projects such as Thameslink 2000 will provide increased capacity for commuter trains entering London, experts suggest that commuting will decline due to the 'e-working' revolution, if this occurs. Infrastructure providing access to outdoor leisure facilities, including national parks may therefore even have better long-term prospects and positive implications for future generations.

**Chapter 4 Case study: The reopening of the Penrith-Keswick railway line  
in the Lake District National Park.**

**4.1 Background information**



**Fig. 4.1 Map of the Lake District National Park**  
**Source:** [www.lake-district.com](http://www.lake-district.com)

In order to place the Penrith-Keswick scheme into context, it is useful to consider the Lake District National Park in its entirety, in several relative subject areas. Statistics are taken from Volume 4 of the 1994 All Parks Visitor Survey (unless otherwise stated) which, while not entirely up to the minute, are a good indicator.



Firstly, it is important to consider where visitors to the National Park actually come from. Table 4.1 illustrates the origins of holiday visitors e.g. those visitors who spend more than a single day in the National Park.

London & South East	19%
North West	18%
North	12%
Yorkshire & Humberside	11%
West Midlands	10%
South West	7%
East Midlands	7%
Scotland	6%
East Anglia	3%
Wales	2%
Ulster	1%
Other Areas	4%

**Table 4.1 Origin of holiday visitors to the Lake District National Park**  
**Source: 1994 All Parks Visitors Survey: Lake District Combined Site and Roadside Surveys**

Table 4.1 shows an overwhelming majority of visitors coming from the south. This is substantially accounted for by the bulk of the UK population living south of the park. However, significant numbers of visitors from areas in the south of the UK are notable, in particular that London & the south east account for the highest percentage of holiday visitors. Also that the south west (which itself has 2 national parks) attracts a larger proportion of visitors than Scotland, which is in much closer proximity to the park. A similar pattern is evident in the origins of day visitors to the park. Table 4.2 shows origins of day visitors from the immediate locality. Over a quarter (27%) of these visitors are from Lancashire.

Lancashire	27%
South Lakeland	9%
Allerdale	8%
Carlisle	8%
Copeland	6%
Eden	4%
Barrow	3%
Other Areas	35%

**Table 4.2 Origin of day trip visitors to the Lake District National Park**

**Source: 1994 All Parks Visitors Survey: Lake District Combined Site and Roadside Surveys**

Table 4.3 shows the percentage of survey respondents, both holidaymakers and day trip visitors, which visited the various areas of the National Park.

	<b>Day visitors</b>	<b>Holiday visitors</b>
A591 Corridor	43%	60%
Ambleside	25%	53%
Bassenthwaite Lake	13%	21%
Borrowdale	5%	34%
Eastern Fells	4%	13%
Keswick	29%	59%
Langdale	6%	24%
Northern Fells	9%	20%
South Lakes	22%	51%
The Coast	4%	13%
Thirlmere	4%	21%
Ullswater	26%	38%
Western Fells	11%	33%
Windermere	38%	56%
Woodland/Rusland/Cartmel	7%	16%

**Table 4.3 Areas in National Park visited by day trip and holiday visitors (Percentage of respondents). Note: figures sum to over 100% due to multiple responses.**

**Source: 1994 All Parks Visitor Survey: Lake District Combined Site and Roadside Surveys**

Keswick is visited by over a quarter (29%) of day visitors, and over half (59%) of holiday visitors. These are within a few percent of the numbers of day visitors (38%) and holiday visitors (56%) that visited Windermere, which is rail served by a branch line from Oxenholme on the WCML.

Table 4.4 shows the areas in which holiday visitors stayed overnight, as a percentage.

Ambleside	8%
Bassenthwaite Lake	3%
Borrowdale	4%
Eastern Fells	2%
Keswick	17%
Langdale	6%
Northern Fells	4%
South Lakes	13%
The Coast	1%
Thirlmere	1%
Ullswater	9%
Western Fells	6%
Windermere	15%
Woodland/Rusland/Cartmel	2%

**Table 4.4 Areas where visitors stayed overnight**

**Note:** figures sum to over 100 per cent due to multiple responses

**Source:** 1994 All Parks Visitor Survey: Lake District Combined Site and Roadside Surveys

The survey indicates that 17% of holiday visitors stay in Keswick all or part of the time, the highest percentage shown. The second highest is Windermere at 15%.

90% of visitors travel to and within the Lake District National Park by car ([www.lake-district.gov.uk](http://www.lake-district.gov.uk)). 89% was the proportion recorded in the 1994 survey. 25% of day visitors and 36% of holiday visitors entered the National Park via the A66 road, which parallels the track bed of the former Penrith-Keswick railway line. It is assumed that a similar proportion of private vehicles left the National Park by this route.

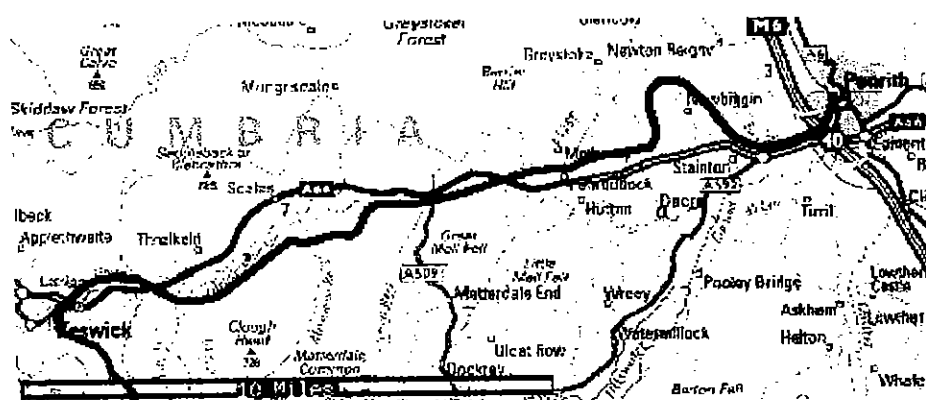
It is interesting to note the percentage of visitors that were, to a greater or lesser extent, regular visitors to the park. 59% of visitors came once a month or more often. Almost a quarter (23%) of holiday visitors had visited the Lake District National Park more than ten times in the past five years. The relevance of this is that it indicates that the vast majority of visitors have at

least some familiarity with the area, and therefore many will have a 'usual way' of reaching Keswick.

69% of day visitors visited on a Sunday. It is interesting to note that the number of buses between Penrith and Keswick is considerably less on Sundays than during the week. In surveys on satisfaction with facilities and services, of those using public transport, almost a fifth (19%) considered it to be 'poor'. The author has no knowledge of whether those opinions have changed with improvements carried out since 1994.

Keswick is the second largest parish in the Lake District National Park, with a population of 4,821 recorded in the 1991 Census (The largest is Windermere, with a population of 7,829) ([www.lake-district.gov.uk](http://www.lake-district.gov.uk)). Keswick attracts 6 million visitors each year (Martindale 1998).

#### 4.2 Potential uses of the re-opened railway



**Fig. 4.2 Approximate route of the Penrith-Keswick railway line**  
Source of original map: [www.multimap.com](http://www.multimap.com) (alterations by the author)

The route of the Keswick to Penrith railway line, closed in 1972, runs for 18.5 miles. As mentioned earlier, the route broadly follows that of the A66 trunk

road. 90% of the track bed and structures along the route are intact (Martindale 1998).

A number of options could be looked at for the line's reinstatement. Proposals are currently being put forward by CKP Railways plc, who propose a 75mph line, to be run as part of the national network. This private company would provide the infrastructure. Northern Spirit, the local TOC for the area, has expressed interest in operating the service.

A number of arguments can be put forward for the reinstatement of the Penrith-Keswick railway line, some drawing on the above information and making some initial assumptions. The line could:

- increase mobility for local residents, aiding social inclusion for those along the route of the line without access to a car.
- encourage modal shift from cars to trains, reducing pollution and congestion.
- create new jobs in the area, directly for those working on the railway and indirectly through knock-on positive economic effects. An estimated 56 jobs could be created in total (Martindale 1998).
- provide incentives for businesses to locate in the area, creating further new employment.
- aid moves towards non-car sustainable tourism
- create further improvements to public transport
- be an aid to social exclusion in encouraging those from inner cities and other deprived areas to visit the Lake District.

- Increase the attractiveness of the northern Lake District to potential visitors, enhancing its position relative to the south.
- provide time savings for travellers (an estimated 10-15 minute time saving against the existing bus service on a normal day).

A key question is that of whether the re-opened railway could support itself financially, or whether it would require some kind of operating subsidy. Estimates of passenger numbers vary from the Cumbria Tourist Board, which expects to see 300,000 passengers per year, and CKP Railway's own estimate of 430,000. Table 4.5 illustrates is a simplification of three sets of estimates, and the type of users expected.

	Cumbria Tourist Board	Brian Eaton, consultant	CKP Railways
Local commuting	50,000	50,000	50,000
Scenic attraction	150,000	150,000	130,000
Connection with national network/access for visitors	100,000	100,000	250,000
Park & ride	-	60,000	-
'Novelty value'	-	50,000	-
TOTAL	300,000 (base load)	410,000 (minimum)	430,000

**Table 4.5 Predicted passenger numbers Penrith-Keswick**  
**Source: Martindale (1998)**

The numbers of people travelling to Keswick each year, around 6 million, equal the numbers travelling to Birmingham International Airport (Martindale 1998). It is reckoned that 5% of these visitors using rail would make the line financially viable, this proportion of visitors already being achieved on the Windermere branch (Rail Express March 2001). The value of the Windermere line is widely recognised, and proposals have emerged to double the capacity of this line through double-tracking much of the route and re-signalling.

Estimated cost is under £10million. Visitor numbers to Keswick are also likely to increase substantially in the future in line with general tourism trends.

As recorded in Hillman & Whalley (1980), and also in Martindale (1998), the Penrith-Keswick line was closed on the basis that journeys between these two stations did not alone produce enough revenue to cover costs. However, if the contribution of ticket sales from outside destinations to Keswick had been taken into consideration, and their revenue contribution to the national network as a whole, this would have shown no net loss to the national network. This was rejected at the public inquiry into the line's closure. Much the same principal would, for a line of this type, be useful to apply to the re-opening. If a regional operator, such as Northern Spirit operated the service, the line would develop a substantial part of its revenue for the line from long distance fares. There is the danger that, if the service was run by a local operator running this line alone, that this operator would be subsidising the TOCs that it connected with (Martindale 1998) or at least lose out on potential revenues.

By re-using the route of the previous line, the Penrith-Keswick line would utilise the currently redundant or under-used asset of the track bed. Although the capital cost is significant at around £25m, this compares very favourably with new road construction, with a mile of motorway typically costing around the same amount. The cost would be considerably higher if an entirely new right of way had to be constructed.

The line could make an important contribution to modal shift in the Lake District National Park as a whole. With reference to 2.1, visitors to the area could be intercepted at various points depending on the types of services operated on the line and the level of integration as part of a network of high-quality public transport in the area.

There would be an opportunity for direct services from conurbations and regions in the UK. The Windermere branch has direct trains from and to many destinations, including Manchester Airport. Another comparison is the Newquay branch in Cornwall, which has direct trains from the north on summer Saturdays run by Virgin Cross-Country. With reference to visitor origins in Tables 4.1 and 4.2, there is potential for direct train services from many parts of the country. Evidence of visitor origin suggests more scope for direct trains from south of Penrith than north. Trains would need to reverse at Penrith, but this is already standard practise elsewhere on the rail network. Trains from north of Penrith could promote new journey opportunities from areas such as Scotland and the north east. In addition, a shuttle service from Penrith would provide a simple connection with 140mph Virgin Pendolino tilting trains from London, which are due to start operation at these speeds from 2005. This package would provide an extremely time-competitive means of reaching the Lake District, and could become popular for weekend visitors from the south east. Speeded-up Virgin Cross-Country trains will also call there in the near future. So interception at or near journey origin could become a more attractive choice for potential visitors.



For interception at the threshold of the area to be visited, various park & ride options would be worth consideration, particularly suited to day visitors. There are two main points where this could be done, at Penrith or at Threlkeld quarry (see Appendix B). At Penrith, visitors could leave their cars at Penrith station, or possibly at a parkway station adjacent to the M6. This is more likely to succeed if:

- using the railway has a novelty value to visitors that would enhance their visitor experience, or
- traffic inside the boundary of the park is somehow restricted or discouraged.

Possible tools for restricting car access could include road-pricing or traffic management, perhaps in the form of information screens indicating where roads are congested. Another option is the inclusion of these roads in the 'Trafficmaster' system, so that visitors would be aware of congestion as and when it occurs, and thence encouraged to consider alternatives. Another possibility is that, if there was a Lake District transport 'network', Penrith could be marketed as an access point to this network.

Threlkeld quarry is not part of the CKP Railways current proposal, although there is talk by local authorities of a bus park & ride on the site, if access can be adequately provided. Opportunity may exist to imitate the Swanage model by providing a short-haul rail shuttle service from here into Keswick. Local authorities would, as at Swanage, need to support car parking and other provision, as well as considering measures such as pedestrianisation of

Keswick town centre. Park & ride could generate 60,000 passengers per year (Table 4.5).

#### 4.3 Obstacles to reinstatement and conflicts of interest

Although 90% of the route is undamaged, the other 10% presents some significant obstacles. In places, deviations from the original route will be required, a bridge over the A66, and the un-blocking of a tunnel at the western end of the line (see Appendix B). Although there are technically feasible solutions to these problems, the costs of reinstatement are significantly increased by each obstacle. The two main viaducts on the line, Troutbeck and Penruddock, are still owned by Rail Property Ltd. Until such time as they are brought into the ownership of CKP Railways, or another sympathetic party, they can not be considered totally safe from demolition, but there appear to be no plans to dispose of them in the near future.

Some parties will consider that there are reasons for not re-opening the railway. Potential losses if the railway were built might include:

- losses to local bus services,
- loss of the public foot and cycle path between Keswick and Threlkeld, at least in its present form,
- losses to local landowners, such as farmers.

The railway footpath is a particularly prominent issue at the moment, as much has been invested in the provision of this facility, including a boardwalk which deviates the footpath around the filled-in 'Big Tunnel' (Appendix B) and other facilities. Local landowners have been sounded out on the idea of renting their land to the railway, and receiving regular income from it. It is clear that careful compromises need to be made in many of these situations, particularly if the support of the local community is to be maintained.

#### 4.4 Support and potential sources of funding

Of the local governing bodies, different positions have developed between the various councils and authorities in the area. Keswick Town Council is enthusiastic about the line, but its resources are limited in terms of providing any major financial push to the project. Cumbria County Council has offered to give any non-financial support. This includes the use of various council facilities by the promoters. However, the line is not included in the council's 5 year transport plan, although it is briefly discussed. Allerdale District Council has recently declared its support (Rail February 21-March 6 2001). The Lake District National Park Authority appears unresolved about whether to support the project, and in terms of finance, may feel that its limited funds for transport are better spent elsewhere on smaller-scale schemes that offer a quicker return.

As regards lottery funding, the Penrith-Keswick project has not yet been able to benefit from this source. Although deemed eligible for Millenium funding, for which £12.5m was applied for, this funding was denied when the Millenium Dome was given the go-ahead. It was not the only railway project to suffer the same setback. The project would have qualified for Heritage lottery funding on a number of counts, but was deemed ineligible due to the ownership of the project being different from that of the National Park. Lottery funding as a possibility appears to have been ruled out for the time being.

Although the assumption made in 3.3 was that RPP funding could only be paid to a TOC, the promoter of the Penrith-Keswick scheme, Cedric Martindale, cites that, upon examining the 'small print', there is scope for exceptions, and that an RPP bid has been submitted for the scheme, with a response to this expected in April 2001. Therefore it is not possible to comment at this time as to whether this works in practise.

CKP Railways is currently attempting to raise £2.5m through a Bonds issue to proceed to a Transport & Works Act. Private investors, including individuals and local businesses, are a vital part of the current strategy, attracted by the prospects of becoming stakeholders in the line when it is up and running. Current plans are to have trains running by 2004.

The author considers that, upon initial examination, there is potential for the railway to play a serious role in transporting day trip visitors and short stay visitors from at or near origin to destination. The line would clearly be useful to

local residents, expanding opportunities such as access to education and shopping choice, and may not require an operating subsidy. However, it would require a strong local support network along the lines of a CRP (2.3).

The single largest obstacle is funding of the capital works, as there is still no obvious mechanism for funding schemes such as this which, in rail terms, are a fairly small investment, but in local public transport terms are prohibitively expensive. It remains to be seen whether RPP funding will be able to fill this gap.

## **Chapter 5 Review of the options**

### 5.1 The Options

The aim of this chapter is to provide a concise review and comparison of the various options open to those responsible for transport in national parks, and tying these back to the needs and problems identified in the first chapter. Does a course of action account for some, none, or all of the problems indicated previously? The author then offers some concluding observations on the topic in general.

The basic tools available to transport policy makers in national parks are as follows:

- Do nothing
- Traffic management/calming
- Better marketing of existing facilities
- Major bus improvements
- Rail investment

Improvements of existing rail access, creating new rail access through reopened railway lines, creating new rail access along a totally new route

- Road-pricing

The circumstances of the various national parks differ greatly. Therefore, not every national park will benefit from all, most, some, or perhaps any of the measures explored in this dissertation. As mentioned in 1.2, the Brecon Beacons National Park does not suffer significant traffic problems. If that is the case, then incentives to use public transport, and/or deterrents to car use, as a means solely of reducing traffic congestion are not applicable. Beyond the aim of removing congestion however, the

wider agendas of environmental sustainability and social exclusion, if aspired to, are perhaps not met by the do nothing option.

Edwards (1991) observes that “in some areas resources would be better spent on the marketing of existing services”. The author’s own experience of visiting Keswick using the bus link from Penrith station, which runs every half an hour for most of the day, is that this was in fact a fairly good service, and a lot could be achieved through better marketing of what currently exists. Tickets can be bought from any station on the network to Keswick by means of this facility. Moorsbus (2.2) illustrates very clearly the benefits of improved marketing of services, and opportunities very probably exist for improved marketing. For example, a partnership between inter-city train operators and hotel owners in national parks could create package deals for weekend breaks similar to those offered by operators such as Eurostar to European cities. National park authorities could play a role in promoting such ideas, and co-ordinating them with their local initiatives.

Re-opening of dismantled routes may not necessarily serve the needs of the present or the future. Indeed, it should be remembered that many of the railways built in the nineteenth century were built for freight flows that no longer exist. It therefore might be sensible to consider, in certain circumstances, the construction of a line serving a previously unserved need. One such line is advocated for the north-south axis in the Lake District, linking Keswick to Ambleside, Grasmere, and Windermere, where a railway has not previously existed, built to metre gauge.

Many technical and planning issues would need to be dealt with if a totally new railway was to be put down, although many of the re-openings proposed would require substantial deviations from their original route in certain places.

At present, national park authorities in the UK are not pressing for road-pricing. The Lake District National Park Management Plan (1998) states that: "The National Park Authority will monitor developments and promote debate on the relevance of such schemes to traffic management in the Lake District."

The importance of road-pricing in national parks, if implemented, could be significant for the viability of railway re-openings, as well as any dramatic improvements to existing bus and rail services. Money taken from motorists could be accounted for on two main criteria. The first is, as the 1998 report mentions, its practical use as a 'traffic management' tool. This would serve as a simple financial deterrent to driving into the national park, and could be an effective way of getting people to use good public transport, if this was available.

The second possible justification for road pricing is in the environmental costs of motoring in national parks that motorists are not currently paying for. In economic terms, road-pricing would use the market to correct a market failure. Revenue from road-pricing could be used to cross-subsidise more sustainable public transport alternatives. The amount of revenue generated could be significant, to the extent that the passing of some of this revenue to a reopened railway may mean that external subsidy may not be required. It could also finance construction.



The author sees that road-pricing has the potential to give national park authorities more autonomy in the form of an ability to fund and support transport services as they see the need with a greatly reduced dependency on outside sources of funding, and therefore less dependency on the willingness of outside bodies to support subsidies and investment. However, in the present climate, any traffic restriction measures will be fought against by tourist attractions, hotels, and other businesses in national parks who would fear a loss of trade, perhaps by motorists deciding not to visit at all (Owen 7/3/01).

## 5.2 Final Conclusions

This conclusion outlines the author's own observations on the subject, in the light of the research carried out.

As stated at the end of Chapter 1, the nature of transport to and within National Parks, as well as other popular countryside destinations differs substantially from normal rural areas. The massive numbers of visitors to the parks, and the existence of a peak and off-peak, be it seasonal rather than time of day related show some similarities with urban transport, and therefore national parks are a special case in which many of the aspects of rural and urban transport come together. Solutions therefore could potentially be on quite a large scale, depending of course on the size of the problem.

An important observation has been the way in which the subject is approached, and the various persons who have an active interest or responsibility in this area. The

need to look at techniques such as SCBA or system dynamics modelling is part of a wider need to discipline judgements and look at problems and solutions objectively. While pressure groups on all sides serve a function, the opinions of those that take a hard line on issues are no basis on their own for policy. Decisions on the future of transport in national parks would benefit from a more scientific approach, and one that takes into account the precise circumstances of a particular national park and its needs.

The situation regarding railway re-openings themselves also needs to be looked at on a purely objective basis. There is a tendency among the various parties on all sides to pre-suppose the likelihood of what the best solution might be. As well as the railway 'enthusiast' lobby, we have a legacy in the UK of government policy that considered road-building in isolation, rather than conducting multi-modal studies which might have advocated re-opening or electrification of a neighbouring railway line as better value for money. This is now beginning to change, an example being the multi-modal study into the proposed M4 Newport Relief Road. However, this process will still be held up in the short term, as public attitudes towards transport and how it should be provided have yet to change significantly.

Current government policy, although moving towards greater investment in public transport still sees new roads as 'vote winners', and a number are expected to be given the go-ahead before this year's general election (The Times 5th March 2001). Some of the road schemes still involve construction in national parks and AONBs. In this sense, the 'sceptics' will continue to hold a strategic advantage for the time being.

As regards the prospects for re-openings at the present time, it appears prospects are best for the reconstruction of through routes through national parks, such as Matlock-Buxton, which may go ahead because of wider strategic objectives in the rail industry, such as, in this case, a priority north-south heavy freight route. The re-negotiation of rail franchises is also bringing forth proposals from bidders for re-openings, such as the Woodhead route in the northern Peak District. This would strengthen rail services between Sheffield and Manchester, and therefore relieve parallel roads through the park.

A second type of scheme that may have good prospects is a volunteer-lead scheme such as Wensleydale, which will also be a heritage steam line. Permanent way would be extended piece by piece. Although this takes time, preservation has a track record of extending lines to make them viable, and many of the most successful heritage railways started with only a short running section. Such schemes benefit from volunteer labour and having to employ very few staff. It will still be a big test to see if a private railway can make non heritage public transport operations viable, but the prospects of the infrastructure being put in place should be healthy. There is great advantage for the promoters of a project if it does not have to prove its worth before construction by means of feasibility studies etc., and does not have to rely on block grants of millions of pounds.

The concept of constructing private lines purely for public transport services is unproved in the modern era, and the need to construct a line in its entirety 'in one go' rather than a phased approach presents significant obstacles, and a very strong case

is required to secure potentially large amounts of outside funding. However, if a scheme goes ahead, and is seen to succeed, as was seen with light rail in the early 1990s, attitudes will change and the idea will gain greater acceptance. However, immediate prospects for such re-openings do not appear to be strong at this time.

Any new lines, once running, would need local marketing and co-operation at least to the extent of the CRPs discussed in 2.3, and possibly local management in the form of something akin to a micro-franchise. Integration with other modes is a necessity, and best results would be achieved where the line was to form part of a network consisting of all rail and bus services, and where a single ticket allowed freedom of travel, just as people enjoy in their cars. Many national parks have now adopted this approach. Bus connections for local people, or even a train taxi service similar to that run in Holland would be essential in delivering full benefits to those without access to a car who do not happen to live close to a station. Thought should be given as to how to make trains appropriate for purpose. Features such as provision for bicycles and large windows for viewing the scenery, as seen on the Siemens RegioSprinter would probably be appropriate, and there is clearly evidence that some sort of hype or novelty value can pay dividends (2.2, 2.3).

### 5.3 Methodology

Research was carried out over the duration of the project by the following means:

- Literature review (books, journals, news magazines).
- Interviews and regular contact with persons, by telephone and email.

- Attendance at a Cardiff University conference (See Appendix C).
- Field visit to the Lake District National Park

This was detailed more precisely in stages 1 and 2.

As regards limitations, the biggest limitation on research was that, having decided to base findings primarily on aggregating the views of a body of contacts, that this carried with it some inherent problems. The main difficulty was that the people contacted were all busy people, and accommodating the needs of an undergraduate student was, understandably, a fairly low priority. This means that, from some sources, the levels of input initially hoped for never materialised.

In assembling this project in its final form, the project could always have benefited from further research, but the particular nature of an undergraduate dissertation, with a precise deadline that had to be met, precluded this. There are certainly some avenues that the author would like to have been able to explore further, but there would have been a limit on how much could have been included. Issues such as bus use and subsidies for public transport could easily support studies of their own. It would have been interesting to go deeper into issues of technical, social, and financial feasibility, but the author did not feel qualified to do this. That being the case, any attempts at doing this would have been of dubious validity. The study might be of use to someone considering whether to pursue such techniques.

The aim was to produce a study that put the subject of railway re-openings into some kind of context, rather than examining them in a level of technical detail that inhibited

the ability to look at the 'big picture'. The author hopes this is what was accomplished.

## References

### Books/Journals

Anon. (1994): 1994 All Parks Visitor Survey Report of the survey in the Lake District National Park, Volume 4, Final Report Centre for Leisure Research and JMP Consultants Ltd, October 1995 (pp. 11-12, 14, 20, 25-27, 35)

Bishop, K., Owen, E., Speakman, C., Wilde P. (1998): Northern Snowdonia Study: Developing Local Economic Opportunities through the Management of Visitor Traffic, Main Report, Environmental Planning Research Unit, Cardiff University

Breakell, B. (1999): "Moorsbus - on the Right Road", *Countryside Recreation*, Vol.7 no.2 Summer 1999, Countryside Recreation Network pp. 6-10.

Breakell, B. (2000): Funding Rural Recreational Bus Services North York Moors National Park Authority

Bunn, N. (1996): (Keswick-Penrith) Pre-feasibility study Cumbria County Council

Cole, S. (1998): second ed. Applied Transport Economics Kogan Page

Countryside Agency (2000): "The State of the Countryside 2000" The Countryside Agency

Crabtree, R. (2000): A System Dynamics Model for Visitor Choice of Transport Mode To and From National Parks, *Countryside Recreation*, Vol. no. 2000, Countryside Recreation Network pp. 2-5.

DETR (1998): "A New Deal for Transport: Better for Everyone" The Government's White Paper on the Future of Transport July 1998

Edwards, R. (1991) Report of the National Parks Review Panel Countryside Commission

Hillman, M and Whalley, A (1980): The social consequences of rail closure, Policy Studies Institute, London

Holding, D. (1997): "Germanic Calm" Global Transport Spring 1997

Howe, M. & Mills, G. (2000): "Appraisal of Non-commercial Passenger Rail Services in Britain" *Journal of Transport Economics and Policy*, 18, pp. 113-130.

Lake District National Park Management Plan, 1998 Lake District National Park Authority

Lesley, L. (1997): "Light Rail for the sake of your health", *Global Transport*, Chartered Institute of Transport pp. 92-93.

Martindale, C. A. (1998): Return to Keswick - The Case for a new Railway, Icen Enterprises Ltd.

Nash, C. (1997): Transport externalities: does monetary valuation make sense? In de Rus & Nash (eds.): *Recent Developments in Transport Economics*. Ashgate

Owen, E., Bishop, K., Speakman, C. (1999): "The Northern Snowdonia Study - An innovative approach to sustainable tourism development", *Countryside Recreation*, Vol.7 no.2 Summer 1999, Countryside Recreation Network pp. 6-10.

Salveson, P. (1997): What use are Rural Railways?: The social, economic and environmental benefits of rural railways Transport 2000 Trust in Association with TR&IN

Salveson, P. (2000): Developing Rural Railways: Options for Decentralised Operations on Secondary Lines SRA ([www.sra.gov.uk](http://www.sra.gov.uk))



Turner, R. K., Pearce, D., and Bateman I. (1994): Environmental Economics Harvester Wheatsheaf

Whitelegg, J. (1997): Critical mass: transport, environment and society in the twenty-first century,  
London : Pluto in association with WWF

Whitelegg, J. (2000): How can railways become more socially inclusive by 2020? *A report for the Rail  
Passengers Council* Rail Passengers Council

### **News Magazines**

Platform, No. 1, April 2000

Rail, No.403, February 21 – March 6 2001

Rail Express, No. 58, March 2001 pp. 14-15

Railway World, Vol. 62, No. 730, March 2001 pp. 46-49.

Trains, Vol. 61, No. 2, February 2001 pp. 48-55.

Transit, No. 150, February 2nd 2001 pp. 9-11.

### **Notes**

Patel, T. (2001)

## **Internet Sources**

American Southwest

[http://www.americansouthwest.net/arizona/grand\\_canyon/national\\_park.html](http://www.americansouthwest.net/arizona/grand_canyon/national_park.html)

Lake District National Park

[www.lake-district.gov.uk](http://www.lake-district.gov.uk)

Strategic Rail Authority

[www.sra.gov.uk](http://www.sra.gov.uk)

Sustrans

[www.nationalcyclenetwork.org.uk](http://www.nationalcyclenetwork.org.uk)

Wensleydale Railway PLC

[www.wensleydalerailway.com](http://www.wensleydalerailway.com)

## **Lectures**

See Appendix C

## **Interviews**

Cedric Martindale, consultant, Iceni Enterprises/CKP Railways

Interviewed 4/1/01

Elwyn Owen, tourism Consultant, R. Elwyn Associates

Interviewed 7/3/01

Plus telephone and email conversations.

## **Other Contacts**

At Cardiff University-run conference (See Appendix C) 7/11/00:

Bill Breakell, North York Moors National Park Authority

Neil Buxton, Esk Valley Line Partnership

Leo Markham, Brecon Beacons National Park

Dr Paul Salveson, Transport Research and Information Network (TR&IN)

Plus contact by email

Colin Speakman, Countrygoer

Plus contact by email

Other persons contacted:

John Whitelegg, Ecologica

Contact by email

## **Appendix A**

**Fig. 5.1 Visitors to the Inner Study Area**

**Fig. 5.2 Evaluation of the main Options for Reducing Car Dependency by Visitors**

Owen *et al* (1999)

Figure 5.1: Visitors to the Inner Study Area – Potential Interception Points

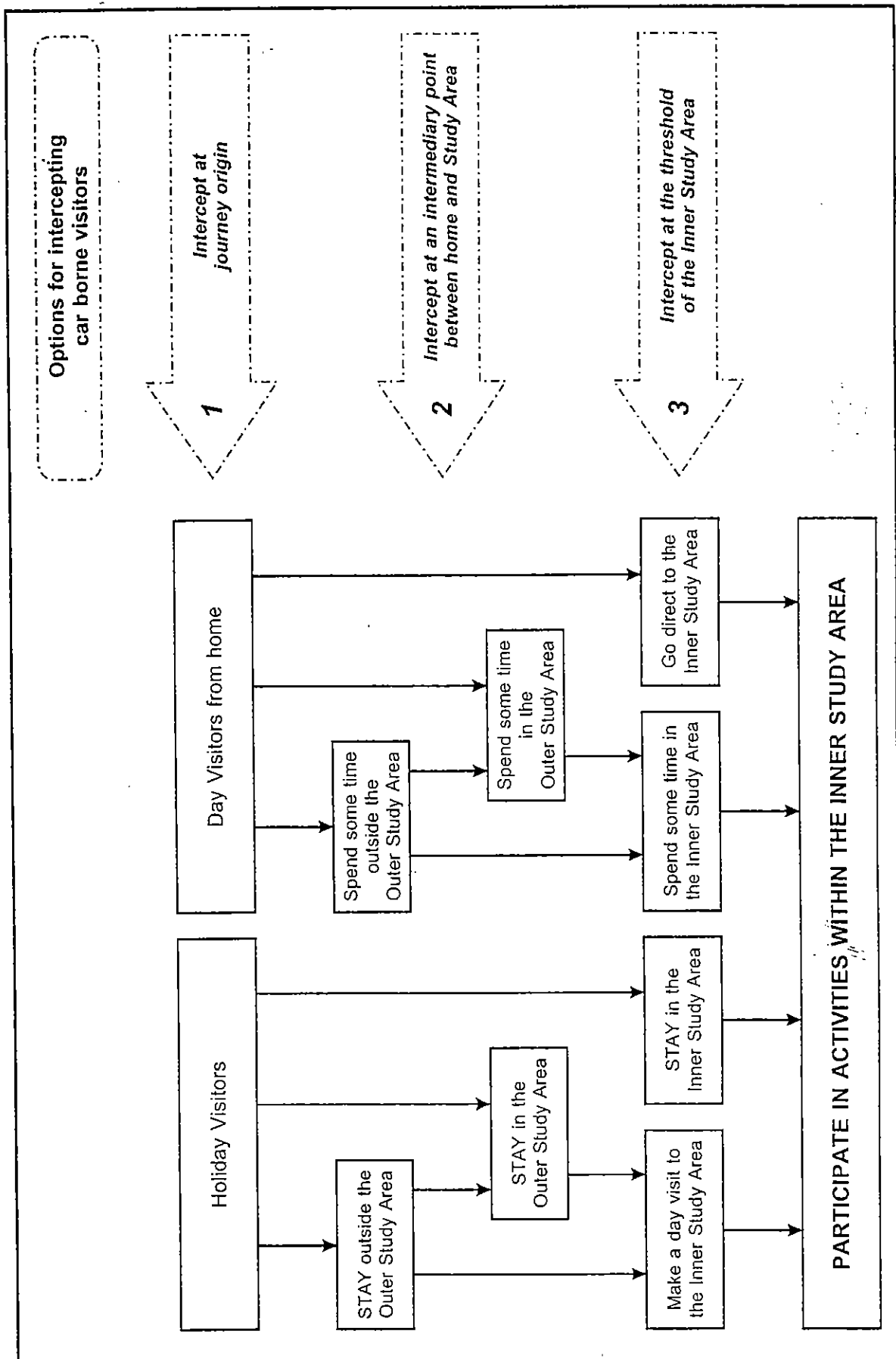
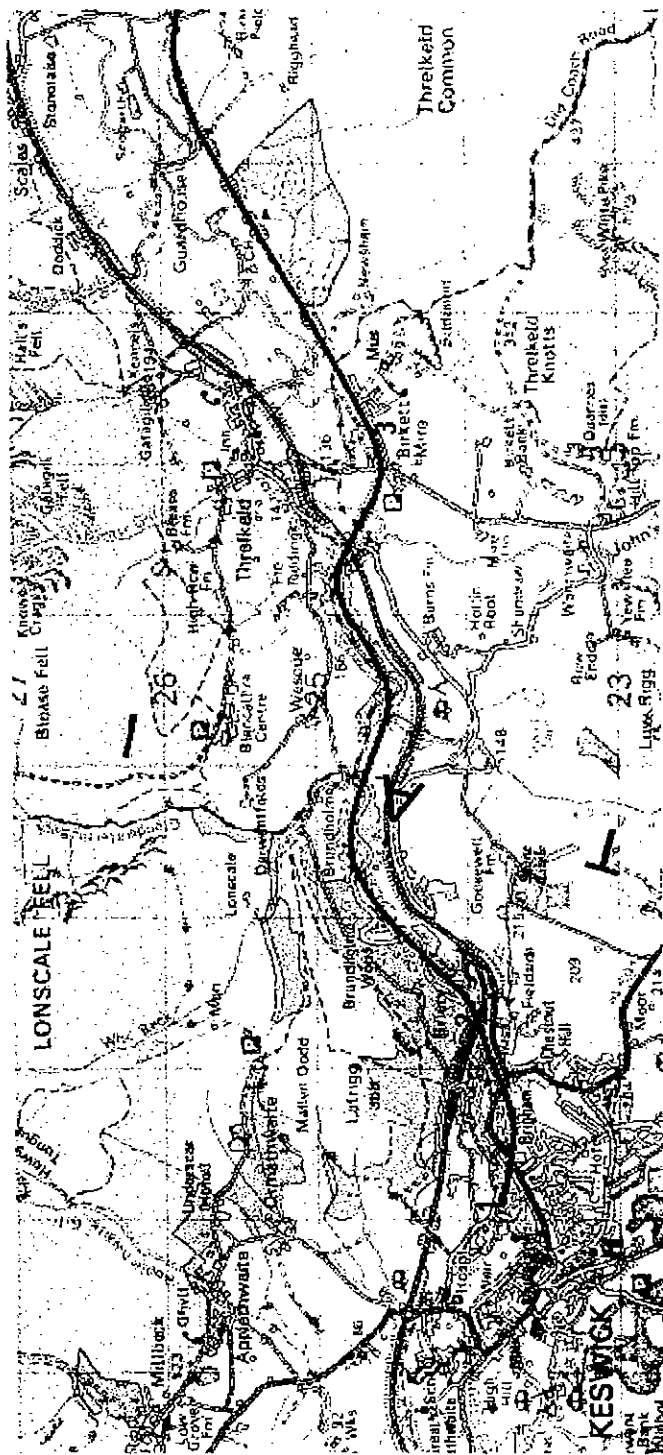


Figure 5.2: Evaluation of main Options for Reducing Car Dependency by Visitors

OPTIONS	ADVANTAGES	DISADVANTAGES	POTENTIAL MECHANISMS AVAILABLE TO DESTINATION AREA PLAYERS
1. INTERCEPT AT JOURNEY ORIGIN	<ul style="list-style-type: none"> <li>Most sustainable in terms of reducing car dependency</li> <li>Growing niche market for non-car tourism (especially overseas visitors)</li> <li>Environmental and economic benefits accrue not simply to destination area -- but also to traffic generating area and intermediate areas</li> </ul>	<ul style="list-style-type: none"> <li>Most difficult to achieve in the short term</li> <li>Not suitable for certain types of visitor and generally perceived as being least convenient (loss of freedom)</li> <li>Potential adverse effect on attractions and areas least accessible by public transport</li> </ul>	<ul style="list-style-type: none"> <li>Development of integrated and efficient national and local public transport systems</li> <li>Development of products and packages for staying and day visitors, that can be accessed and enjoyed using public transport</li> <li>Marketing initiatives within key generating areas, by tourism agencies, local authorities, tourism operators, carriers and the travel trade</li> </ul>
2. INTERCEPT AT AN INTERMEDIARY POINT BETWEEN HOME AND STUDY AREA	<ul style="list-style-type: none"> <li>Helps to reduce car use between home and destination area</li> <li>Most likely to appeal to holiday visitors</li> <li>Helps to integrate the tourism economy of the inner study area with other parts of North Wales</li> <li>Provides springboard for increasing visitor spend</li> <li>Takes advantage of existing public transport assets (e.g. Conwy Valley Line and Ffestiniog Railway)</li> </ul>	<ul style="list-style-type: none"> <li>Requires a good integrated public transport system, linking such places as Anglesey and Llyn with the inner/outer study area</li> <li>Long journey time from some settlements to inner study area likely to be a deterrent - especially for day visitors intending to focus on inner study area activities</li> <li>Probably the hardest option to achieve, in terms of achieving significant modal shift, owing to complexity of connections</li> </ul>	<ul style="list-style-type: none"> <li>Development of an integrated and efficient public transport system within study area and its immediate hinterland e.g. marketing of public transport links from key nodal points (e.g. Llandudno to Betws-y-Coed via Conwy Valley line)</li> <li>Development of products and packages for staying and day visitors that can be accessed and enjoyed using public transport</li> <li>Development of innovative public transport products (e.g. day coach tours from key resorts, using smaller/more efficient buses)</li> <li>Development of imaginative public transport pricing and ticketing schemes,</li> <li>Marketing initiatives within North Wales, by tourism agencies, local authorities, tourism operators and carriers</li> </ul>
3. INTERCEPT AT THE THRESHOLD OF THE INNER STUDY AREA	<ul style="list-style-type: none"> <li>Potentially the most effective in terms of achieving a modal shift within the inner study area).</li> <li>Easier to persuade visitors to use (especially those who intend to park their cars for several hours within the inner study area)</li> <li>Provides springboard for increasing visitor spend in the inner study area</li> <li>Concentrates visitor spend by increasing dwell time at Park and Ride settlements and providing a focus for attracting new visitors</li> </ul>	<ul style="list-style-type: none"> <li>Does nothing to reduce car dependency beyond the boundaries of the inner study area</li> <li>Requires radical review of parking and traffic management and investment in new systems</li> <li>May require increased car parking space at the threshold of the inner study area, with potential environmental disbenefits</li> <li>New products and amenities within the inner study area may lead to a net increase in car borne traffic, despite achieving a more favourable modal split</li> </ul>	<ul style="list-style-type: none"> <li>Restriction of parking opportunities within inner study area</li> <li>Creation of major gateway/interchange points, offering effective information and additional spending opportunities</li> <li>Development of efficient Park and Ride bus service within the inner study area and nearby key feeder settlements</li> <li>Development of imaginative pricing and ticketing arrangement</li> <li>Development of products and packages for staying and day visitors that can be accessed and enjoyed using public transport</li> <li>Creation of a definitive brand image for Northern Snowdonia, as a special and cherished area, which can be enjoyed without the shackles of a car</li> <li>Marketing initiatives within inner study area and beyond, by tourism agencies, local authorities, tourism operators and carriers</li> </ul>

## **Appendix B**

Keswick-Penrith railway re-opening in detail



## Appendix B

Section 1: Keswick-Penrith railway re-opening in detail. Blue line denotes route of railway.

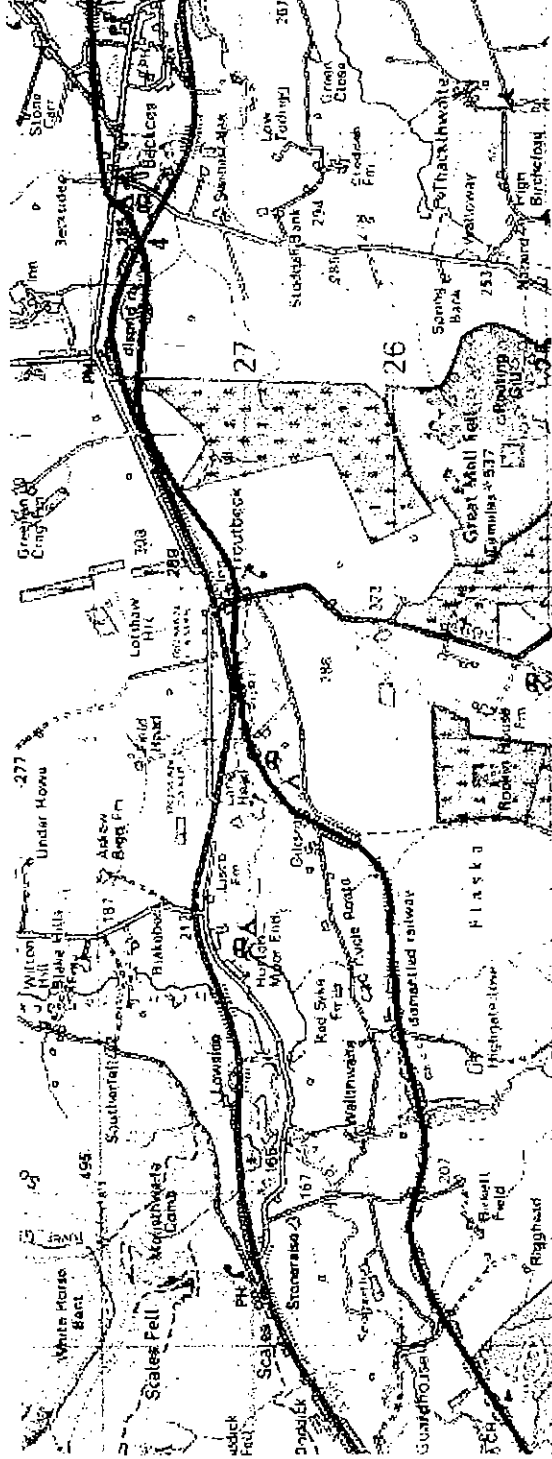
Source: Original map- [www.multimap.com](http://www.multimap.com) © Crown Copyright OS

Additional detail by the author

### Key locations

1. Keswick station
2. 'Big Tunnel' (under A66)
3. Threlkeld quarry

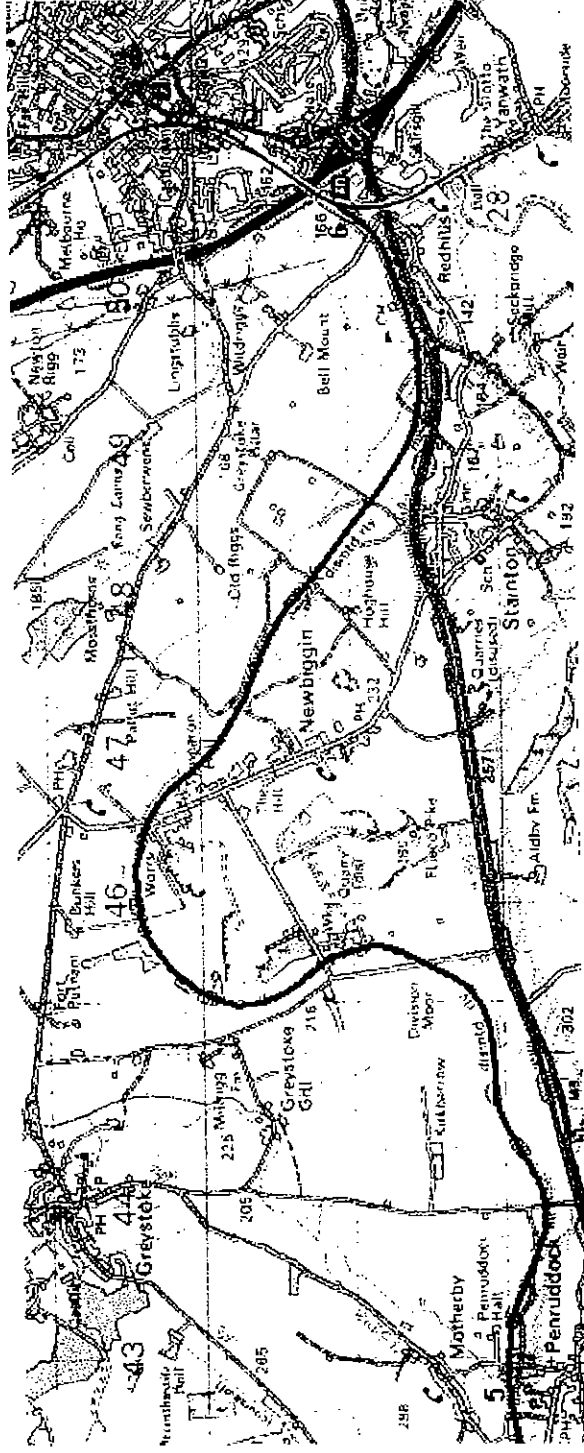




Section 2: Keswick-Penrith railway re-opening in detail: Section 2  
 Source: Original map - [www.multimap.com](http://www.multimap.com) © Crown Copyright OS  
 Additional detail by the author

#### Key locations

4. A66 crossing (bridge required)



### Section 3: Kewick-Penrith railway re-opening in detail: Section 3

Source: Original map - [www.multimap.com](http://www.multimap.com) © Crown Copyright OS

Additional detail by the author

#### Key locations

- 5. Penrith station
- 6. Junction with Railtrack
- 7. Penrith station

## **Appendix C**

### **“Are We Getting There? Delivering Sustainable Transport in the Countryside.”**

7<sup>th</sup> November, Glamorgan Building, Cardiff University

All talks attended plus 2 workshops.

#### **Workshops attended:**

Delivering Integrated Transport: Case study – Moorsbus

Community Rail Systems

### Session 3: Workshops

- 2.00 Workshop session 1
- 3.00 Workshop session 2
- 4.0 Tea/ Coffee Break

### Session 4: The Road Ahead?

- 4.15 **Summing Up and Closing Remarks**  
Feedback from Workshop sessions and presentations ~ summing up the main themes and ideas running throughout the day.  
Speaker: MsCarey Newson (Transport 2000)
- 4.45 Close/ Depart

### Workshops

The workshop sessions will be aimed at providing and discussing practical solutions to real problems to be held in two sessions of three workshops. The discussion will be led by workshop leaders involved in the implementation of practical schemes. Each workshop leader will give a 15 minute introduction start the discussion. The remaining 45 minutes of the workshop will provide a forum to share management experiences and to draw some conclusions on the way forward.

#### Session 1

##### *Delivering Integrated Transport*

Case study – Moors Bus

Leader: Mr Bill Breakell (North York Moors National Park Authority)

##### *Developing Local Routes for Walking and Cycling*

Case study – Greenways

Leader: Ms Jacqui Stearn (Countryside Agency)

##### *Canals and Inland Waterways*

Leader: MrTerry Kemp (Kennet and Avon Canal – British Waterways)

#### Session 2

##### *Community Rail Systems*

Leader: Dr Paul Salveson (TR&IN)

##### *Local Transport Plans and Funds*

Good examples of LTP in action

Leader to be confirmed

##### *Access to Countryside Recreation*

Case study: CCW "Environment on your doorstep" project

Leader: Mr Richard Ninnes (Countryside Council for Wales)

# Are We Getting There? Delivering Sustainable Transport in the Countryside.”

7<sup>th</sup> November, Glamorgan Building, Cardiff University

## Programme

10.00 Registration

10.30 Welcome and Introduction  
Chairman: Mr Glenn Millar, (British Waterways)

### Session 1: The Road to Nowhere?

10.40 *Trends in Travel and Transport*  
Setting the scene on what is actually happening in terms of transport and policy in relation to the demand for travel.  
Speaker: Professor John Whitelegg (Ecologica)

11.00 *Leisure Trends*  
What is happening to the leisure 'market' and how this will impact on the demand for transport and travel; the link between transport and recreation and people (including social inclusion issues)  
Speaker: Mr Elwyn Owen (R. Elwyn Owen Associates)

11.20 *The Policy Response*  
To include: EU – local level, White paper, walking strategy, impacts of devolution etc. Must have a recreation and countryside focus, including funding and implications of the csr.  
Speaker to be confirmed

11.40 Panel discussion: Questions and Answers

11.55 Tea/Coffee break

### Session 2: Getting on the Right Track

12.10 *Supply-led Solutions*  
Development of recreation close to where people live – what works, what doesn't work – with examples e.g. Greenways, Country Parks, Cycle Networks. Dampening of demand in countryside sites e.g. charging schemes. Shifting the recreation experience to the people.  
Speaker: Paul Walton (*Sussex Downs Conservation Board*)

12.30 *Demand-led Solutions*  
Overview of the various approaches highway authorities and other bodies can adopt: Road charging, Park and ride, Traffic calming, Green networks, bus/ rail initiatives etc. Methods to manage existing and future demands in a sustainable way.  
Speaker: Mr Colin Speakman (Transport for Leisure Ltd)

12.50 Panel discussion: Questions and Answers

1.00 Lunch