Providing Public Transport for Tourists in Rural Areas

Theme: Enhancing sustainable development through rural tourism experiences

Abstract
Travel, both to the destination area and within the area, accounts for a high proportion of tourism’s emissions. Yet, relatively little attention has been directed at reducing emissions through encouraging visitors to use public rather than private transport. This paper reports the findings of surveys of bus passengers within British rural tourist areas and demonstrates how they bring extra visitors and spending to attractions, while reducing car use. It discusses the potential of using public transport to enhance the tourism offer and the problems, and some solutions, of funding such services. Recent developments are introduced.

Key Words:
Rural tourism, public transport, spending, car use reduction

1. Introduction
Although there have a number of campaigns to reduce car use, they rarely target leisure travel which also remains an under-researched topic. The closest substitute to car travel is usually the local bus, but these appear unattractive alternatives for anyone unfamiliar with the services or area, uncertain about their destinations or timings or perceiving bus travel as expensive. For tourist destination areas, encouraging a transfer from private to public transport can reduce congestion and parking problems as well as the intrusion (visual, noise, danger, pollution) in areas, often visited for their tranquillity, natural and historic landscapes. Buses also present potential for engaging with visitors, for interpretation and enhancing the visitor experience and attracting new markets.

This paper reports on the findings of surveys conducted in nine rural areas in 2010 and 2011 for a project funded by the Economic and Social Research Council. The surveys of bus passengers asked about their journey purposes, their motivations for using the bus and what they would have done if the bus service had not been available. They also gathered data about spending for the day of travel and accommodation. A large proportion of the respondents would have visited a different attraction or stayed at home without the bus service and many of those who would have transferred to car travel, would have visited another destination.

The findings appear to justify increased spending on tourist bus services for the benefit of the area and the tourists. However, an exercise conducted with representatives of organisations delivering bus services found divided motivations for subsidising bus services and decision-making not always supporting value for money. This raises doubt about the importance of empirical evidence in funding decisions.
We discuss the difficulty of funding for tourist bus services and different ways of overcoming this. The paper describes innovative schemes to induce more sustainable tourist travel, without necessarily marketing it as such. New technologies show great potential for encouraging more sustainable behaviour amongst tourists such as the use of smart phones. The discussion outlines how bus services could be made more attractive to tourists, the potential they offer and the barriers to such improvements.

2. Literature Review

Although many bus services run as commercial operations, many require support from public funds and, yet, in the UK, there is no recognised method of evaluating their value for money or formalising the different social objectives they fulfil.

Much of the literature about providing public transport in tourist areas focuses on the potential to reduce car use (see; Eckton, 2003; Guiver et al, 2007; Reeves, 2006, p4) rather than its implementation. There are a number of projects in the UK (Cullinane and Cullinane 1999; Eaton and Holding 1996) and elsewhere (Dilworth 2003; White 2007) to encourage modal shift and reduce congestion, CO₂, other emissions (Bavarian National Park, 2012) and other environment damage and to increase capacity where road and parking space is limited (National Park Service, USA, 2012). Examples include the Alpine Pearls (see http://www.alpine-pearls.com/en/home.html) (La Rocca, 2009; Verbeek, Bargemen, 2011) the KonusCard in the Black Forest (Hilland 2011) and GUti card in Bavaria (Wibmer 2012). The New Forest Tour estimates to have saved 147,000 car miles within the National Park in one year (New Forest Park Authority 2011-2012, p 11) and the Moorsbus claims a saving of one million car miles in the North York Moors National Park since 1994 (Bussell and Suthers 2010).

However, Dickinson and Robbins (2007) question the effectiveness of public transport in reducing car use because of the observed reluctance of visitors to use relatively frequent bus services. With 96% of visitors arriving in English National Parks by car (English National Parks Authorities Association, 2012), there is obviously room for more effective actions to reduce car use.

Many of the bus services provided in areas of recreation in the UK justify the expenditure involved through extra revenue generated in the destination area (see Bussell and Suthers (2008) regarding the impact of the Moorsbus on local businesses and New Forest Park Authority 2011-2012, p 11, who estimate that the New Forest Tour brought over £500,000 to the area). Because many of the bus-borne visitors spend in local businesses, who use local suppliers and employees, the value of the spending is increased by the local multiplier effect (Sacks 2002). Downward and Lumsdon (2004) however, suggest that bus users’ spending is below that of car users because of poorly timed bus services, which prevent bus users from staying later in the evening to buy evening meals, etc.
3. Methodology

The survey template was designed to be easily adapted for each area. The questionnaire was handed to passengers by local surveyors on the surveyed bus, together with reply-paid envelopes. The responses were transferred to macro-enabled spreadsheet which generated an instant report of the area’s results. The spreadsheets for all the areas were amalgamated to give the total results and analysed further using SPSS.

In 2010 seven organisations took part: The Peak District National Park, Yorkshire Dales Community Interest Company, Hadrian’s Wall Heritage Ltd, Brecon Beacons National Park, Northumberland Coast Area of Outstanding Beauty, Three Rivers Community Rail Project (Hampshire), Durlston Park (Dorset). In 2011 there were further surveys in Norfolk and Brighton and Hove, resulting in a total of 1118 responses.

4. Findings

Passengers

The passengers are predominantly older than the general population and with slightly fewer men. Approximately 9% reported disability affecting mobility. The passengers are mainly from lower income groups, (with a high proportion of retired people), but nearly 10% have incomes of £50,000 pa plus. 49% had a car available. Visitors from overseas accounted for 8% of the passengers (93 passengers) and the greatest number (18) came from the USA.

Journey purposes

The main primary journey purpose was walking (27%) followed by visiting a place or attraction (22%), shopping (13%) and visiting friends or relations (10%) and seeing the countryside from the bus (7%). Walking, seeing the countryside from the bus and visiting a place or attraction were also important secondary reasons for the journey (see Figure 1).

Figure 1: Journey purposes
Benefits to the area

The replies to the question “What would you have done if the bus service had not been running?” indicate that 64% would have visited another destination (31%) or stayed at home (33%) (see Figure 2).

![Figure 2: Alternatives if bus not running](image)

The average day’s expenditure, excluding accommodation, was £18.25. One third of the respondents stayed overnight, with an average cost per person per night of £22.23 and average stay of 6.23 nights. When averaged out over all respondents this brings the total average daily expenditure per passenger to £24.84. Excluding the people who would not have visited the area reduces the number of visitors by 66% and spending by 62%. Nearly one quarter of all respondents say they would use a car if the bus were not available, although not necessarily going to the same destination.

Policy-makers’ decision-making

The final seminar of the project brought together nearly fifty participants including bus operators, officers from National Parks and similar areas, local authority managers, academics and representatives of voluntary organisations involved with transport. In an activity, participants were grouped according to their role and were first asked to express their personal priorities in terms of percentages for bus services in rural tourist areas between the following categories: health, car-use reduction, local spending, and social inclusion. Their priorities differed greatly: car use reduction was the most important for the bus operators and National Park officers, social inclusion was the highest priority for voluntary organisations and academics, while local authorities accorded almost equal priority to each aim (see Figure 3).

Next the participants were given fictitious rates of return for each aim to weigh up the value of money allocated to each aim against the others. These indicated that any amount under £500 spent towards local spending would generate less spending than it cost. Each group was instructed to allocate a nominal £1,000 according to the negotiated preferences of the group. Although every group allocated some money to local spending, none suggested over £500 and their discussions
suggested that the symbolic division of the budget was as important as the efficiency of spending. The discussions also demonstrated how people with stronger voices and more conviction tended to sway group decisions.

**Figure 3: Initial priorities**

![Initial priorities](image)

**Figure 4: Allocation of £1000 budget**

![Allocation of £1000 budget](image)

5. **Discussion of Findings**  
**Benefits**  
The research confirms previous findings (Bussell and Suthers, 2008; Guiver and Lumsdon 2006) that buses in rural tourist areas can attract new visitors and generate spending in the area. It also provides additional evidence that they are instrumental in reducing car use in places where cars can compromise the attractiveness of the area (see also Guiver et al. 2007; New Forest Park Authority
2011-2012; Reeves, 2006). The study demonstrates how such benefits can be captured and measured.

However, experience with such services indicates that they are far from reaching their potential in levels of service, quality and variety of offering and marketing. In the past they have been starved of funding and suffered from short-term, insecure support and short planning cycles (Dickinson and Dickinson 2006). Gronau and Kagermeier (2007) illustrate how such services need three to four seasons to achieve a steady patronage. While improving the services would inevitably require investment, the increase in patronage from visitors and residents may recoup at least some of the initial expenditure.

A well-marketed public transport system within a destination area can encourage modal shift from the car for the journeys to and from the area. The Lake District National Park and Cumbria County Council (2011, p4), recipients of a substantial grant to make recreational travel within part of their area more sustainable, recognised that tourists would be unwilling to arrive without a car unless they had confidence in the local public transport. Although they calculate that nearly half the carbon generated by tourists to the Lake District is from the journeys to and from the area, they have prioritised local transport in the first stage of their improvements in order to establish that confidence.

Changing destinations
The data reveal that the provision of transport can influence the choice of destination. It is evident that people who are dependent on bus travel would be unable to reach a desired destination (unless it were within walkable/cyclable distance). Yet, some people who would revert to a car in the absence of the bus would visit a different destination. The bus service partly motivated the visit to that destination. Unlike utility travel, leisure travel is discretionary including: whether or not to travel, the destination, timing and mode. Some passengers show more allegiance to the mode than the destination, suggesting that going by bus is more important than the destination. Much of this may be related to the concessionary bus pass. People in their sixties and older can travel on any scheduled bus for free. Many of these people are going out for a bus ride and any destination with suitable services may attract them.

Other potential visitors may be encouraged to review their choice of mode if the destination marketing stresses the ease by which it can be reached by public transport. A large proportion of the passengers came to go walking. Using the bus allows a linear walk instead of having to walk there and back. Comments from previous surveys (Guiver and Lumsdon 2006) suggest that, without a bus service, some walking parties would have used two cars in order to complete a linear walk.

Potential
Most rural bus services in tourist areas are not currently reaching their potential to attract passengers and so reduce car use and its damage to the local and global environment. The evident problem for anyone attempting to visit such an area by public transport is the lack of frequency, short operating season and, in many cases, short operating day. Not only does this restrict the travel opportunities of the bus passenger, it reduces their spending as suggested by Downward and Lumsdon
(2004), particularly the ability to enjoy a drink or meal at the end of the day/walk. Although recent British summer weather has not been very encouraging for people visiting the countryside, we enjoy long light evenings and many walkers and others would relish the opportunity to buy refreshments at their destination if they were confident of transport services back home or to their accommodation.

Several areas (Trossachs and Loch Lomond (see http://www.fvl.org.uk/archived-website/case-study/bus-walks-pilot.htm), Lake District (see http://mediafiles.thedms.co.uk/Publication/CU/cms/pdf/Travel-555-Stagepath.pdf), Brighton and Hove (see http://www.southdowns.gov.uk/enjoying/outdoor-activities/walks-and-rides)) have published leaflets showing how walks can be combined with bus use. Some areas, such as the Yorkshire Dales offer guided walks from bus stops and stations (see http://www.dalesbusramblers.org.uk/) and others have designed their walks to be accessible by public transport (see http://www.shropshirehillsaonb.co.uk/things-to-do/walking-with-offa/#guided-walks).

Another group of potential users are cyclists, if their bicycles could be carried on buses. There have been a number of technical problems with this, but the Brecon Beacons National Park Authority has operated a ‘bike-bus’ for a number of years. Cyclists use this to reach the National Park and then cycle back down the cycleways (see http://www.mtbbreconbeacons.co.uk/bike-bus). Similar schemes operate in the New Forest and Lake District.

Many people find driving in rural areas, especially those with narrow twisty lanes, difficult and stressful. Travelling by bus gives the driver an opportunity to see the view without having to steer. British double decker buses also offer the opportunity of a better views from the top deck. Several areas (eg Brighton and Hove, New Forest, Cornwall and the Lake District) operate open-top buses. These intrinsic aspects of bus travel are now being marketed as experiences in their own right and as the data demonstrate many passengers appreciate seeing the countryside from the bus. These buses also have the advantage of being highly visible, so promoting themselves; possibly one reason why 14% of respondents reported knowing about the bus because they had seen it.

The bus environment presents an opportunity to provide interpretation of the route. Guides provide this on the route along Hadrian’s Wall in the north of England, but new technology may offer greater prospects of interpretation through passengers’ own phones and mobile devices. The Lake District is currently experimenting with apps to give visitors ideas for local trips without using cars (see http://www.nurturelakeland.org/be-car-free/see-more-lake-districtexplore.html). Real-time information about bus services using a smart phone is greatly appreciated (Cade 2013).

Many public transport services in rural areas do not reflect tourist needs. A survey in the Lake District found the pattern of bus services bore little resemblance to the pattern of flows for car users (Kirkbride 2012) and it is common to find that services do not connect with other bus or train services, leave too early for people to have breakfast in serviced accommodation (Disney 2009) or allow too little time or too long at the destination. As Schiefelbusch et al. (2007) point out leisure trips,
because they are out of the routine, present an opportunity to change habits, but ‘travel chains’ must be simple for the traveller and these include flows of information. For this, they need to be designed from the traveller’s point of view and start from their doorstep (ibid p96) or even their living room, when they start to plan their trip.

The ‘marketing’ of bus services in rural areas has, all too often, been limited to timetables at bus stops, and even this has been haphazard, often displaying out-of-date or partial timetables. Although information is an essential aspect of public transport, it scarcely constitutes marketing, (ie targeted at specific groups with relevant messages). Anable’s (2005) research into day visitors demonstrates how groups with apparently similar behaviour have different motivations and are likely to respond to different triggers to change their behaviour. It seems highly probable that people whose primary motives are a destination, activity or mode would require different approaches and messages for them to consider bus travel as a viable option. For people, whose main motive is the destination, it may be messages from the destination rather than about travel that would prompt a mode-switch. Previous (unpublished) research using interviews with bus users also indicated that people intending to holiday in an area without a car wanted advice about suitable locations. This is the reverse of current journey planners, which will tell you how to access a given location by public transport.

Modern means of communication (websites, smart phones, apps, etc.) offer new potentials for marketing and accessing information when it is needed for journey planning. However, the messages need to be carefully thought through and presented. Most of them are unlikely to be about sustainability, often seen as a turn-off to green tourism (Dolnicar and Leisch 2008; Moriarty 2013), but present new experiences and convenient travel.

**Who might fund services**

Thus, although there appears to be ample evidence of the benefits of providing bus services for tourists and great potential to improve the services and patronage, they are generally under-funded and insecure about their funding. Partly this relates to the organisation of bus services, tourism and environmental protection in the UK. Bus services are either run commercially by bus companies or subsidised by local authorities. In some areas bus companies enjoy near monopoly conditions and thus the most likely supplier of tendered service on non-commercial routes.

The lack of tourism experience within bus companies often inhibits their view of the potential. An exciting exception to this is Norfolk Green, who have grown their bus services in north Norfolk through a combination of low fares and high quality. They also have developed sophisticated marketing and information presentation (see [http://www:norfolkgreen.co.uk/services/index.aspx](http://www.norfolkgreen.co.uk/services/index.aspx)) and particularly have promoted the Coasthopper service along the coast with ideas for walks and days out (see [http://www.coasthopper.co.uk/walks.aspx](http://www.coasthopper.co.uk/walks.aspx)). They also connect into public transport bringing people into the area, which their owner (Coulson 2011) says encourages repeat visitors to leave their cars at home once they have tested the bus and developed trust in its services. The results are one of the fastest growing bus routes in the UK with over half a million passengers per year
(Norfolk Green 2013) and a season extending to nearly eleven months (Coulson 2011).

For traditional bus companies, there is less enthusiasm for building the tourism market, with its seasonality and weather volatility, than for concentrating on core routes and markets. The introduction of free fares for concessionary pass-holders throughout England in 2008 (there were already schemes in Scotland, Wales and Northern Ireland) further complicates the market. On many routes, the majority of users qualify for free travel. The bus companies are re-imbursted by the local authority with a proportion of the adult fare for the journey, which has encouraged several bus companies to raise fares to increase the re-imbursement. This, however, discourages bus travel by fare-paying passengers and makes bus travel less competitive with the car, particularly for groups and families.

Local authorities in the UK are facing cuts in their finances. This has resulted in cuts to subsidised bus services as well information provision. Support for leisure services is not politically popular at a time when services to hospitals and schools are being cut. There is even less incentive when the routes cross local authority boundaries, often the case for leisure services.

English National Parks and other protected areas are responsible for “Promot(ing) opportunities for the understanding and enjoyment of the special qualities of National Parks by the Public as well as “Foster(ing) the economic and social well being of local communities within the National Parks”(National Parks, 2012). Although a number of them have supported and promoted bus services (Reeves 2006), support for these services is being reduced as National Parks’ budgets are also cut. However, the introduction of the Local Sustainable Transport Fund has brought increased funds for visitor travel in the Lake District and Yorkshire Dales with plans for improvement in Exmoor and Dartmoor National Parks.

Another potential source of funding is the businesses who benefit from the extra visitors and their spending. The New Forest National Park Authority have used data collected from passengers on their first New Forest tour, showing the high spending at local businesses to attract businesses to underwrite a second bus tour (Gregory 2011). This has been highly promoted by the National Park Authority and sold as an experience rather than as travel. It offers interpretation as well as ticketing designed to encourage families and other groups and carries bicycles (see http://www.thenewforest.co.uk/discover/new-forest-tour.aspx). In Breadalbane, central Scotland, a group of local businesses and organisations have banded together to provide the Ring of Breadalbane Explorer bus service (see http://www.perthshirebigtrecountry.co.uk/news/details/102) for visitors, using funds from a variety of sources, including the re-imbursement from concessionary travel. In other areas, tourism businesses appear convinced that car-users are their major source of trade and resist efforts to attract other markets or encourage more sustainable travel such as increasing car parking fees.

A group of volunteers have also formed a community interest company to mobilise funds from several different sources, including local authorities, to run a

In some other countries, there is more concerted effort to promote tourism in each area. Tourist taxes in the Black Forest and Bavaria have made it possible to offer free public transport use to all staying visitors (Hilland 2011, Wibner 2012), although there is little evidence about how these are used by tourists and whether they deliver benefits in reducing car use or attracting new markets.

**Further research**

This limited research project opens a number of questions about tourist travel in rural areas. An obvious avenue would be to investigate car users’ and their attitudes towards using public transport. In a limited study, Guiver (2009) found that, although car users felt they chose their destination and then how they would travel there, only 8% of them looked for public transport information. More research into the decision paths of tourists about both their holiday destination and day trips around it could help identify effective intervention points and messages for different market segments.

As yet, we know very little about the influence of local public transport in the mode choice for the journey to and from the destination area, although evidence from Norfolk and Pembrokeshire (Higgins 2010) suggests this is a factor for repeat visitors. The developments in the Lake District may provide an opportunity to investigate this, both at an aggregate scale and for individuals’ choices.

It is also important to investigate the relative costs and benefits of providing for car users and public transport users in a rural tourist area, including the potential to increase spending through increasing the possible duration of stay at the destination.

**6. Conclusions**

The surveys undertaken in rural tourist areas in 2010 and 2011 provide evidence that providing bus services in rural tourist areas can help reduce car use in sensitive areas and attract visitors and spending. They also suggest that a substantial proportion of visitors will change their destination in order to use a bus. However, the services are limited and almost certainly not fulfilling their potential of reducing car use and increasing visitor numbers. This is almost entirely due to a lack of funding and support from bus companies, local authorities and National Parks, who all have higher and conflicting priorities. However, an exercise at a seminar organised for different groups with a role in organising and managing bus services in tourist areas found that value for money was not necessarily the only criterion for allocating funds within a budget.

The paper provides a number of examples of good practice in improving services, the quality and offering of the services, marketing and information provision. It suggests the lack of a single authority responsible for tourism in an area, as well as reduced and stretched budgets, militates against better public transport provision in rural tourist areas. It demonstrates how some areas and companies have been able to fund better services through joining forces and seeking funds from a variety of sources.
Suggestions for further research include investigating the potential to encourage car users to switch to public transport, the role of travel facilities within the destination area in influencing mode choice for the journeys to and from the area and the relative costs and benefits of providing for public transport and car users.

References
Brighton and Hove City Council (2012) Walk and Ride Leaflets
Coulson, B. (2011) Coasthopper, Seminar: Buses in Tourist Areas (UCLan and ESRC), Preston, April
Dilworth V. (2003) Visitor perceptions of alternative transportation systems and intelligent transportation systems in national parks. Department of Parks, Recreation, and Tourism Sciences, Texas A&M University, Texas
Disney, J. (2009) personal communication


Gregory, C (2011) New Ways of funding the New Forest Tour, Seminar: Buses in Tourist Areas (UCLan and ESRC), Preston, April


Guiver, J. (2009) Report to the Lake District National Park Authority, University of Central Lancashire, Preston


Higgins, R. (2011) personal communication

Hilland, S. (2011) Funding for Buses in Tourist Areas -The Black Forest and its KONUS Guest Card, Seminar: Buses in Tourist Areas (UCLan and ESRC), Preston, April

Kirkbride, A. (2012) personal communication

Lake District National Park Authority and Cumbria County Council (2011) Lake District Sustainable Visitor Transport: Beacon Area, Bid to Department of Transport


