Identifying key factors for the successful provision of public transport for tourism

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As the case studies in part 2 of this book show, establishing suitable mobility services in rural and protected areas is anything but simple. This chapter attempts to bring together the experience gained around the world and to identify which key factors are required to ensure the successful provision of public transport in protected areas. The focus is on general aspects on the demand side and their implication for shaping services, aspects concerning internal cooperation between stakeholders on the offer side, and the crucial question of economic sustainability, which will be addressed in detail in the next chapter.

18.1 Basic conditions for the provision of public transport in rural protected areas

Leisure traffic undoubtedly has a high affinity towards private motorised modes of transport (cf. Guiver 2007: 276, Gather and Kagermeier 2002: 9). In Germany, for example, buses and trains account for only 10 per cent of motorised leisure day trips, and only one out of seven holidays involve the use of terrestrial public transport (cf. Kagermeier 2003: 264). At the same time, the share of non-captive visitors, i.e. visitors who choose to use their own cars, is higher than is the case in everyday transport. Hence one of the reasons for such massive reliance on private modes of transport is that tourist groups with a high degree of car ownership are overrepresented in leisure traffic. Additionally, trips undertaken by whole families and groups give members of the family or group who do not usually have access to a car the opportunity to go on car journeys, too. Hence the tendency to use private motorised vehicles appears to be a structural precondition, even before other aspects on the demand or offer side are taken into account.

Furthermore, users of leisure transport facilities are often passengers by choice, i.e. they are free to choose between different modes of transport. In contrast to many everyday trips involving a specific destination, leisure trips give people a wide range of destinations to choose from. Hence the issue of providing public transport for leisure is quite different to that of providing public transport services for everyday needs. Whilst in the latter case, potential passengers must be certain of reaching their destination, enabling them to hold down a job, a tourist destination need not usually be accessible because visitors are free to choose which place they want to visit. Similar to retailers concerned about customers' ability to reach their store, operators of leisure facilities and stakeholders in tourist regions want to attract cus-

tomers/visitors, therefore it is up to them – the offer side – to ensure accessibility. Unlike retailers and many other service providers, who can choose their location based on good accessibility, tourist destinations are geographically restricted. Nature-based tourist destinations such as protected areas are usually located a long way from metropolitan areas and high-capacity public transport hubs.

If potential visitors who can choose from a variety of modal alternatives and destinations are to be addressed, then high-quality transport services must be offered. The level of quality of the transport service must be reflected in all of the basic "hard" conditions, i.e. the frequency and quality of the service, and the price charged.

Another crucial basic condition requiring consideration is that the demand for leisure-related transport is highly volatile, featuring high, short peaks at the weekends and during the holiday season, and levels close to zero in the low season. Moreover, nature-based tourism is heavily influenced by meteorological parameters. A cold, rainy weekend may cause demand to fall significantly, whereas a hot, sunny weekend may attract visitors in droves.

The issue of varying demand in everyday transport can be resolved by offering flexible demand-responsive solutions. These measures include using different sized vehicles, providing optional schedules and only serving routes when passengers have actively requested use of the public transport service. In order to reduce costs, the service is only given when the need for it has been voiced (cf. Enoch 2004: 32 or Farrington, Gray and Kagermeier 2008). Demand response transport can reduce the cost of a transport service, but still meet people's everyday mobility needs. However, demand-responsive transport usually fails to attract passengers of choice. In other words, services that are adequate for captive passengers in a demand-driven everyday setting usually fail to attract visitors to a leisure or tourist destination.

As a result, providers of public transport in rural protected areas are faced with a dilemma: in order to encourage visitors of protected areas to use public transport, a high-quality service must be provided. However, high-quality services are very expensive to run. To make matters worse, the temporally volatile and often spatially dispersed demand fails to cover the full costs of the service provided.

Seeking to resolve this fundamental dilemma, there are often suggestions to use the a "carrot and stick" method (Dickinson and Dickinson 2006:199, Lumsdon 2006: 754, Gronau and Kagermeier 2007: 132, Guiver 2007: 277, Scuttari, Della Lucia and Martini 2013: 617). According to this method, people become more willing to pay or the volume of demand required to make a public transport service profitable is increased by introducing disincentives for car use (by introducing a ban on cars, reducing parking spaces or imposing financial disincentives).

18.2Conditions on the demand side

In addition to addressing the fundamental dilemma described above, it is even more essential to analyse the demand side of leisure-oriented mobility offers than in the case of everyday transport options. A number of demand side-related aspects requiring consideration in the attempt to successfully provide public transport in protected areas are discussed below.

18.2.1 Identifying the target groups

First of all, it is important to consider that fact that people's choice of mode of transport for leisure and tourism purposes is often less rational than for everyday mobility purposes (Gronau and Kagermeier 2004: 129). Enjoyment of the actual journey and the ability to drive at will may be strong motives for using a car or a motorbike for leisure purposes. Even the ride itself may be the most important pull factor for undertaking a journey. Hence the motives and subjective dispositions of target groups need to be analysed. One of the tools for identifying subjective aspects on the demand side that have increasingly been applied over the past decade is the concept of creating lifestyle groups (see Chapter 19 for more details about this concept). Visitors who tend to be emotional about their private motorised vehicle and enjoy the fun factor of driving usually exhibit less elasticity to respond to public transport offers. It is harder to convince racing fans to use a bus to get to the race track than to achieve the desired modal split for visitors to a festival run by an eco-friendly non-governmental organisation. It therefore makes more sense to concentrate on target groups that are likely to respond to the stimulus of offering a public transport service. Visitors to protected areas tend to have a nature-oriented mind-set. Such lifestyle groups often have a matter-of-fact attitude towards their choice of transport - even for leisure purposes (cf. Gronau and Kagermeier 2007: 129). As Lumsdon, Downward and Rhoden (2006: 150) showed by undertaking a factor analysis of stated preferences by visitors to the Peak District National Park, the convenience aspect is quite important to visitors. However, their feelings about the use of private cars are quite rational, merely judging cars as a mode of transport, without demonstrating positive emotional feelings. As the findings of Schmied and Götz (2006: 56) show, therefore, nature-oriented tourists, whether of a traditional type or belonging to the LOHAS (= Lifestyle Of Health And Sustainability; cf. Emerich 2011) group, already tend to use environmentally friendly means of transport.

Another obstacle sometimes faced by nature-oriented tourists does not apply to visitors of protected areas: the use of public transport is sometimes hindered by the fact that some nature-oriented sports activities (such as surfing, rafting, diving or skiing) involve transporting bulky equipment. This type of activity is usually very limited in protected areas where, apart from observing nature and visiting nature-oriented exhibitions or nature trails, the main activities are walking, hiking or cycling. When these latter activities are involved, the use of public transport means that visitors no longer need to return to the place where they parked their cars, enabling them to pursue linear walks and courses (Guiver et al. 2007: 281).

18.2.2 Catchment area

In many natural areas around the world, the provision of alternative transportation options is limited to a shuttle bus service covering the last mile. This means that the core area is completely free of cars and that more park & ride facilities have to be installed at the edge of the core area. Hence even if the core area is freed from the negative impacts of the use of private cars, this solution is unsatisfactory from a more comprehensive sustainability perspec-

tive (Lund-Durlacher and Dimanche 2013: 505). In terms of a tourist's ecological (and especially carbon) footprint, the use of an environmentally friendly means of transport for the whole journey is of much greater effect.

When planning a public transport-based offer for the whole trip, it is not enough to merely provide an adequate connection to the next public transport hub (e.g. railway station); it is important to account for where visitors come from and the quality of the public transport services provided in the relevant catchment area and for the whole journey. Empirical evidence from Germany suggests that the same quality of service (especially the frequency of the service) may result in quite different modal-split figures. A metropolitan catchment area with an efficient S-Bahn (suburban railway) system connecting the starting point of the shuttle service may have twice as many visitors using public transport as a comparable service in a rural area with a significantly poorer rail link (cf. Gronau and Kagermeier 2007: 131).

Thus even when car use is restricted – whether by charging high parking fees or disallowing passage – it is essential to consider the public transport network in the whole catchment area in order to avoid having a negative impact on the number of visitors and therefore the economic performance of the tourism industry around the protected area.

18.2.3 Frequency of visit and marketing issues

In everyday mobility schemes, locations are often frequented on a daily basis, several times a week or weekly. Thus the choice of locations and the use of the means of transport chosen are influenced and steered to a great extent by routine. Leisure activities such as visiting a protected area usually occur much less frequently. Sometimes a visit is made only once in a lifetime, sometimes only once a year, or sporadically. It is difficult to reach potential customers via marketing channels even for everyday traffic in rural areas. Raising awareness of existing services requires comprehensive and innovative marketing approaches (cf. Gronau and Kagermeier 2004). Reaching one-time or sporadic visitors is an even greater challenge. Hence particular attention has to be paid to marketing communication addressing visitors. Marketing approaches should be based on a clear market segmentation and the type of visitor to be addressed. Marketing approaches for protected areas around large cities or metropolitan areas have to focus on day trippers who may decide to visit the protected area spontaneously. Marketing approaches for protected areas with a main catchment area in a rural tourist destination, where the majority of visitors are holiday-makers in the surrounding villages and resorts, have to rely on a rather different mix of activities.

When addressing visitors from neighbouring cities or metropolitan areas, it is essential that residents from the catchment area are already aware of the public transport service before they decide to visit the protected area. The fact that day trips are often decided spontaneously without an intensive search for information about sites to visit (including transport opportunities) and that the degree of private car availability when starting from one's own domicile is high means that there are fewer opportunities for marketing communication during the decision-making process. For example, an intensive marketing campaign initiated by the Eifel National Park (Germany) together with the public transport company of the neighbouring Cologne area (Regionalverkehr Köln GmbH) included not only traditional marketing channels such as distributing leaflets, information on the internet and posters in the city of Cologne, but also the use of adhesive foils covering the whole body of tramways to raise awareness among Cologne residents (Wetzel 2008: 11; cf. Fig. 1). As a result of this awareness campaign, the proportion of visitors who reached the national park by public transport doubled between 2005 and 2007 (Erdmann and Stolberg-Schloemer 2007: 14).

Fig. 1: Innovative marketing with adhesive foils covering the whole body of tramways to raise awareness among Cologne residents for the National Park Eifel (Germany)



Photo: Nationalpark Eifel/M. Wetzel

In protected areas far from metropolitan areas, the lion's share of visitors are holiday-makers staying in neighbouring villages and resorts. In this case, the marketing communication can be based to a greater extent on the potential visitor's proactive information-seeking process. The activity programme is usually planned before or during the holiday. Thus the main challenge is ensuring that visitors have the relevant information when deciding to undertake the visit. This, of course, means that detailed and appealing information about the public transport option has to be available together with all printed or electronically disseminated information about the protected area. At the same time, information centres – whether run by a regional or local tourism organisation or an organisation that manages the protected area – have to combine information about sightseeing opportunities with the offer of public transport provision. These criteria place high demands on cooperation between mobility, tourism and nature-protecting organisations and enterprises. All other service providers along the value

chain in addition to stakeholders involved officially must be included in the process. Employees of accommodation facilities play a vital role in communicating public transport opportunities, not just by disseminating published material (e.g. flyers), but especially by providing verbal information. As the study undertaken by Froehlich (1998) in the Bayerischer Wald National Park (Bavarian Forest, Germany) shows, only very few hotel owners were aware of the existing offer of public transport provision and were able inform visitors about it, which meant that they provided only minimal support to visitors who used public transport to reach the core area of the National Park (Gronau et al., 1998). Instead, all stakeholders should be seen as, and view themselves as, ambassadors of the public transport scheme.

The fact that the target group only uses the transport offer very occasionally and that a significant proportion of one-time visitors are addressed means that the response time required for demand to react may be much longer than in the case of everyday transport offers. Empirical findings show that it may take up to three years/seasons for demand to peak (Kagermeier and Gronau 2007: 228).

3 Organisational and structural aspects on the offer side

In addition to the challenges on the demand side, the internal organisational and structural aspects of the stakeholders involved make it even harder to achieve a successful public transport scheme. The heterogeneity and multitude of the stakeholders involved with their different – and to a certain extent sometimes even contradictory – motives, interests and rationalities make it quite difficult to achieve results that satisfy the needs of all the parties involved when establishing public transport schemes for protected areas.

1) Organisations and institutions in charge of protected areas

These organisations and institutions usually tend to place great emphasis on protecting the site in question. To them, the environmental aspect plays the greatest role, and the number of visitors to the site (and the economic impact of the valorisation of the natural heritage) is often side-lined. These organisations commonly regard a public transport service as an instrument to reduce the negative impact on the local environment (noise, air pollution, soil sealing). They usually only have a limited budget that does not allow them to provide considerable support for implementing and operating a public transport service.

2) Destination management organisations

For tourism-oriented organisations (often organised as public institutions or public-private organisations or enterprises), the primary focus is on economic income and the effect tourism has on jobs. They are mainly interested in promoting the destination and assuring an adequate quality of service as well as developing new products and attracting investors to increase hotel bed capacity. Regardless of whether they are publicly or privately financed, they usually only have a limited budget, which does not enable large amounts to be invested in the cost of running a public transport scheme.

3) Private tourism service providers

Since the tourism industry is characterised to a great extent by small and medium-sized enterprises (SME), the financial capacity of private businesses along the tourism service chain at the destination is usually quite limited. Fierce competition and customers' limited willingness to pay result in rather low fares and thus a limited yield: in combination with an often quite low occupancy rate in rural regions around protected areas, it is sometimes even difficult for them to finance the necessary re-investment in their own business. They are mainly interested in augmenting their yield by increasing the number of tourists or the earnings per tourist.

4) Transport and mobility service providers

Bus transport services in protected areas usually experience a peak, especially at week-ends and during the school holidays. Given the difficult situation of the public transport sector in rural areas (cf. Gronau and Kagermeier 2004; see also Chapter 19 of this book), services in protected areas are a welcome supplement to the core business of (public) transport associations, which are responsible for the public transport offer, and the (private) transportation companies that actually run the buses. Since the largest share of public transport in rural areas is the daily transport of pupils, there are often unused transport capacities at weekends and during the school holidays. Hence they are usually keen to run bus services in protected areas – if a decent profit can be made from this business segment – because their key interest is generating earnings.

5) Politicians and society

Official political discourse and public opinion usually tend to concentrate on the global aspects of protecting the environment. Against the backdrop of the sustainability discussion and the current climate change debate, politicians are keen to reduce the negative impacts of leisure-related traffic. Whether the focus is on the global carbon dioxide aspect or the local effects of noise and air pollution emissions (which are often a nuisance to the local population and thus their potential voters), they usually wish to encourage tourists (i.e. non-voters) to change to public transport. However, their positions often appear like "Sunday speeches". When it comes to substantial financial commitments, politicians often refer to the private sector or user-financed approaches for public transport.

6) Tourists

The final stakeholder in the series of groups and interests involved is the tourist or visitor to a protected area. Visitors mainly seek convenience. Hence the key aspect is the ability to access a destination easily – almost regardless of whether it is a leisure park, an exhibition, a beach destination or a protected area (Hergesell and Dickinger 2013). Visitors often choose to drive to their destination. So if, for reasons outside the tourist's interest (expressed by the other stakeholders involved), a change in the modal split towards public transport is intended, this is generally seen as a nuisance by tourists. They are therefore usually rather unwilling to pay more for this service. Tourists often perceive themselves as "cash cows" that are already bringing money into the region. Considering their hedonistic leisure motives, they simply only want to enjoy their holidays as comfortably and pleasantly as possible. If a destination fails to promise care-free, comfortable accessibility, potential visitors are usually free to choose another competing location or destination for their leisure activities.

Ultimately, however, the crucial aspect when establishing public transport schemes for protected areas is not just ensuring that all local and regional stakeholders cooperate in the conceptual design, running and marketing of the product, but securing financial sustainability for such schemes.

One partial solution for increasing revenues for buses serving protected areas could be to avoid mono-functional routes serving only the protected area, instead combining it with a service covering the surrounding smaller villages. One example where this approach generated impressive results is the Naturpark line in the Lippe region (North Rhine-Westphalia, Germany), which will be explored in detail in Chapter 19 (cf. Freitag 2004). There, cooperation between different public and private nature organisations, and tourism and transport-oriented organisations, institutions and enterprises led to a successful public transport service that not only caters for both visitors and inhabitants, but also simultaneously generates additional funding towards the cost of operating the transport service.

Another promising approach for resolving the dead-end problem of insufficient funding, where none of the stakeholders are willing or able to contribute a greater share, was developed in the Black Forest destination. The concept of the "KONUS" card¹ enables tourists to the Black Forest to gain access to all public transport services in the destination without extra charge. Of course, the offer is not free, nor is it financed by public subsidies. The idea behind KONUS is the result of cooperative activities between public and private tourism and transport organisations, institutions and businesses as well as a joint decision taken by local and regional politicians. These actors agreed to give a certain proportion of the local tourist tax (€ 0.30 per overnight stay; Hotz 2008: 3) to the regional transport organisation. All local and regional stakeholders were involved in developing improved schedules and routes to optimise the service for tourists, enabling them to reach the relevant places throughout the Black Forest region easily (including the Black Forest National Park). In 2013, almost 10,000 accommodation options in almost 140 communities were able to offer their overnight guests this public transport mobility option (by presenting them with a ticket for free travel during their stay). The transport enterprises received almost \in 4 million to run the services (Schwarzwald Tourismus GmbH 2013).

The result of efficient internal marketing and the intensity of cooperative activities between all of the local and regional stakeholders involved is that private service providers truly act as ambassadors for the service. They promote KONUS as an added value on their websites (Hotz 2008: 15) "so that potential visitors are aware of this public transport mobility option from the beginning. KONUS even managed to persuade leading national tour operators such as TUI and Thomas Cook to include the KONUS mobility option in their advertisements as an added value" (Hotz 2008: 16).

4 Conclusion

The key factors surrounding the provision of viable public transport services in protected areas were discussed in this chapter. The basic idea is that it is much more challenging to develop and operate such a transport scheme than it is to provide everyday transport options.

¹ KONUS is short for: "**KO**stenlose **NU**tzung des öffentlichen Nahverkehrs für **S**chwarzwaldurlauber", i.e. use of public transport without extra charge for vacationers in the Black Forest.

This is not just due to the basic conditions governing leisure transport:

- a high degree of choice riders
- a high degree of freedom in the choice of destination
- volatile demand with high peaks and long off-season periods.

Solutions from everyday transport options cannot easily be applied to balance these basic conditions. In everyday travel, people who use public transport are usually captive riders with less freedom to choose which location to visit; also, demand is continuous on workdays. In leisure mobility, the (cost-reducing) demand-responsive transport solution does not attract the necessary number of tourists, nor can "stick" measures (i.e. restrictions on car use) be applied extensively without having a negative impact on economic performance. Whilst a high level of quality (functioning as a stimulus or "carrot") is required to address a target group, this same group usually has a limited willingness to pay for the offer, increasing the gap between the service level required to address customers and the insufficient funding available to provide such a level of service.

Apart from these basic conditions, additional demand-side characteristics make the challenge even more difficult. The target group's lifestyle characteristics and the usually inadequate connections in rural catchment areas have to be considered. The one-time or occasional nature of such visits presents an additional challenge to marketing, which has to include all local and regional stakeholders from different spheres.

It is essential to integrate all of the relevant local and regional stakeholders with regard to their different rationalities and goals; their comprehensive cooperation seems to be key to achieving viable solutions for the provision of public transport in protected areas.

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