Sustainable transport in rural tourism: a social practice perspective of visitor travel experiences in the New Forest National Park

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Abstract

National Parks and Areas of Outstanding Natural Beauty are the foci for rural tourism in the UK and it is the statutory requirement of authorities to promote 'opportunities for understanding and enjoyment' of these areas. Yet the scale of visitation and the reliance on the private car for access conflicts not only with the overriding conservation purposes of these areas and wider sustainability objectives, but also detracts from the rural tourism experience that is sought. Sustainable transport initiatives have been developed which reflect existing knowledge of transport use in this context, in particular the role of transport in forming part of the overall leisure experience. However, appraisal of schemes typically draws upon methodologies and understanding from utilitarian contexts with a failure to acknowledge the distinction between travelling as an activity and travelling to reach a destination. Furthermore, the significance of localised transport impacts on these special and fragile landscapes is not fully taken into account. The aim of this research is to examine how transport provision to support rural tourism can meet sustainability objectives whilst fulfilling the legislative purposes of these protected areas.

This study uses the New Forest National Park as a case study area to examine how visitors use transport to reach and travel around the area to develop a framework for the appraisal of transport provision in rural tourism areas. This is achieved by taking a social practices perspective to develop a comprehensive and contextualised understanding of how visitors use transport within the setting of the New Forest. The study included the development of a refined visitor survey which quantified multi-modal transport use amongst visitors, alongside observations and semi-structured interviews undertaken with visitors in situ. The findings of these methods are combined to identify how transport is used within rural tourism visiting practices and how this varies according to visitor characteristics. The use of a social practices lens is used to reveal the elements of visiting practices associated with transport use based upon the 3-elements model (Shove et al 2012) thereby accounting for transport use beyond the physical use of infrastructure, providing for an understanding of the meanings and motivations that visitors attribute to

their visit and how their use of transport sits within these. It also addresses the role of competences in defining how visitors are able to use transport in this context.

The study concludes that transport use within rural tourism visiting practices is firstly differentiated on a spatial and temporal basis with staying and day visitors having access to varying transport opportunities, with further differences between those staying visitors whose accommodation is situated within the rural destination area and those making excursions from accommodation bases elsewhere. Further variation in how transport is used exists within these prevailing practices with respect to the age-structure and composition of the visiting group. Whilst overlap exists between each of these three practices, they present different advantages and challenges when seeking to modify transport provision to meet sustainability objectives. The study develops an alternative approach to the appraisal of transport provision which focuses on the availability of competences within visiting groups to assess the extent that more sustainable transport use can be incorporated into visiting practices using examples from the New Forest. The adoption of the social practices lens has revealed the relationship between the elements of practice emphasising the limitations of transport initiatives which address individual elements in isolation as opposed to the whole practice. The research provides an empirical application of a social practices' perspective on a protracted transport problem.

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List of Abbreviations and Acronyms

Area of Outstanding Natural Beauty **AONB** Department for Business, Energy and Industrial Strategy **BEIS** Department for Environment, Food and Rural Affairs **DEFRA** Department for Transport DfT Great British Day Visitors Survey **GBDVS** Great British Tourism Survey **GBTS** Institute for Public Policy Research **IPPR** Local Sustainable Transport Fund **LSTF Local Transport Plans** LTP **NPPF** National Planning Policy Framework New Forest District Council **NFDC** New Forest National Park Authority **NFNPA** New Forest National Park **NFNP New Forest Tour** NFT Sites of Special Scientific Interest **SSSI** Society of Motor Manufacturers and Traders **SMMT** Special Areas of Conservation **SAC** Sports Utility Vehicles **SUV Tourism South East TSE** United Nations World Tourism Organisation **UNWTO** Visits to friends or relatives **VFR** Youth Hostel Association YHA

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1. INTRODUCTION

1.1. Rationale

Rural tourism represents a significant component of domestic tourism in the UK the majority of which is focused on National Parks and Areas of Outstanding Natural Beauty (AONB). These areas represent a substantial proportion of the UK's total land mass and are designated for their special characteristics which in turn warrant additional conservation whilst representing especially attractive destinations for tourism, this dual purpose being enshrined in legislation. However, in the UK, warnings that the negative impacts of traffic threaten to detract from the special qualities of National Parks closely followed their inception with repeated calls for traffic management measures (Cullinane 1997). Under the Sandford Principle, conservation should be prioritised over recreational needs although the perception of relative impact has shifted over time with a potentially greater acceptance of traffic in these areas (Dickinson and Robbins 2008; Cullinane and Cullinane 1999). Authorities entrusted with the protection of these areas are actively seeking modal shift away from private car use to public transport, walking and cycling. Whilst some isolated traffic management schemes have been implemented, for example the partial closure of the Goyt Valley to motorised traffic, the focus has been on 'carrots rather than sticks' with an imbalance towards incentives for using alternatives to personal car use when visiting rural destinations. 'Carrots' take the form of improved or subsidised public transport services, walking and cycle routes and marketing (Cullinane and Cullinane 1999).

Whilst localised impacts have increased in tandem with the growth in car ownership over the last few decades and an increase in leisure time amongst a more affluent population, the impetus of modal shift has moved away from an intrusion on the enjoyment of the destination towards tackling issues of congestion and air quality and ultimately a desire to contribute to a reduction in global greenhouse gas emissions to address the threat of climate change. In the UK, domestic transport represents 27% of source greenhouse gas emissions, over half of which is attributable to private cars. (Committee on Climate Change 2017). The greatest distances travelled by car are for leisure purposes, including holidays and day trips (Department for Transport 2017).

Globally the tourism sector is estimated to contribute 5% of CO2 emissions although air travel is the largest source of emissions producing 40% of tourism's total carbon emissions and 54-75% of radiative forcing. Car transport is estimated to contribute a further 32% of global CO2 emissions (United Nations World Tourism Organisation 2018). The passenger kilometre emissions for air travel are five times that of car travel (European Environment Agency 2014) but as just 2% to 3% of the global population travel internationally by air each year (Peeters et al 2006) tourism trips by car are more significant in number.

In tackling these issues, the measure of a transport initiative's success is often limited to patronage or mode share overlooking the wider aspects of sustainability and the relative feasibility of undertaking visiting activities without the use of a private car. This approach reveals little about the extent to which transport use in rural tourism is embedded in visiting activities or practices and overlooks where the capacity for modal shift exists and whether this capacity actually exists for all but a few visitor groups. Transport and tourism studies overlook the extent to which car use may become locked into the activities it facilitates (Mattioli et al 2016).

The New Forest National Park provides an opportunity to explore how visitors use transport in a rural tourism context. The National Park Authority have used Local Sustainable Transport Funding to develop transport provision across the Park including bus provision enhancements, cycle hire expansion, information provision and marketing. This study therefore uses this setting to identify current practices and consider how these relate to sustainability objectives. Social practice theory is used to provide a framework for the research. This approach takes visitor activities and their transport use or their visiting 'practices' as the unit of analysis.

1.2. Aims and Objectives

1.2.1. Overall Aim

The aim of this research is to explore how adopting a social practices perspective can expand upon the understanding of transport use within rural tourism in order to contribute to the identification of effective approaches to increasing sustainability.

1.2.2. Objectives

The research objectives therefore relate to the application of the social practice theory in understanding transport use in its existing form and then using this understanding to develop approaches to appraising and implementing measures to increase sustainability:

- 1. To identify existing rural tourism travel practices
- 2. To analyse how practices may vary according to visitor characteristics
- 3. To develop a transferable framework for appraising sustainable transport provision in rural tourism destinations
- 4. To analyse where transport initiatives can be implemented more effectively to increase sustainability

1.3. Overview of Thesis

Chapter 2 provides a review of the existing literature with respect to the nature of rural tourism, largely focusing on the UK. It identifies the main components of rural tourism in terms of where it takes place and key motivations and activities. The impacts of transport are described alongside the legislative context which applies to the UKs National Parks and AONBs, followed by a discussion of the relative success of initiatives aimed at addressing these impacts.

Chapter 3 outlines the key concepts of social practice theory setting out how its adoption within this research provides for a realist position. The 3-elements model (Shove et al 2012) is described with respect to this providing the framework for the initial research objective with practices to be identified in terms of their component elements.

Chapter 4 provides a comprehensive overview of the New Forest National Park including a description of existing transport provision in the context of local and national policy and a review of existing data sources.

Chapter 5 sets out the research methodology. A mixed method approach was adopted which integrated observation, semi-structured interviews and a visitor survey.

Chapter 6 uses the findings of the visitor survey to examine key aspects of visitor transport use including staying visitor travel to reach accommodation and travel to survey sites by all visitor types. The chapter summarises the initial findings with respect to variation in relative accessibility and transport use amongst different visitor groups.

Chapter 7 uses the qualitative data to further examine how transport contributes elements to overall visiting practices.

Chapter 8 discusses the findings in the context of the research objectives and outlines how the research has contributed to the development of further understanding of transport use in rural tourism alongside the development of a new approach to the appraisal of transport initiatives.

2. TRANSPORT AND RURAL TOURISM

2.1. What is Rural Tourism?

The 2011 UK Census identified that 82.4% of England's population lived in urban areas (settlements of more than 10,000 people). The remaining 17.6% lived in the rural areas which made up 85% of England's land area (Department for Environment, Food and Rural Affairs (Defra) 2015).

The 2011 Rural Classification for Output Areas reflects the scale of the UK's population density from 'major conurbation' through to 'hamlets and isolated dwellings'. Defra identify six classifications as 'rural', highlighting the complexity of what it means to be 'rural' and therefore what constitutes 'rural tourism'. For example, the New Forest District which encompasses the majority of the New Forest National Park has a Rural-Urban classification of 'urban with significant rural' whilst all of the four local authority areas within which the Lake District National Park is situated are classified as 'mainly rural' highlighting the variation that exists between different National Parks in the UK.

Visit England, the national tourism board for England; base their understanding of rural tourism on this Defra classification, further linking rural tourism to its destination type and associated tourism products and experiences (Visit England 2009). For Visit England, rural tourism 'products and experiences' are activities which are readily associated with the countryside omitting activities which may have a more urban theme:

"Rural tourism products and experiences include:

Walking; adventure sports; sightseeing and visiting villages; farm shops; cycling; mountain-biking; canal boating; camping and caravanning, horse-riding; fishing; nature; bird watching; painting; arts and crafts; music and dance; literary, drama and music festivals; conservation holidays; visiting historic sites; museums; enjoying food, drink and accommodation in rural locations; business meetings and team building."

(Visit England 2009 Appendix)

Data on visitor numbers to rural destinations, as used by Visit England, are collected by the Great British Tourism Survey (GBTS) for overnight stays and the Great British

Day Visitors Survey (GBDVS). Within both surveys, rurality is defined by the place visited, as selected by individual respondents:

"The classification of type of location as 'seaside', 'large city/large town', 'small town' or 'countryside/village' is a subjective assessment made by the respondents by selecting from those four options" (GB Tourist Statistics 2014 (GBTS) 2015, p128). In 2016, GBTS changed the wording of this question to further differentiate for coastal and rural destinations with "Countryside/village" split into Village and Rural countryside (Visit Britain 2018).

It is on this basis that the GBTS estimates that during 2017 in Great Britain, 19% of all domestic holiday nights were spent in 'countryside or villages' and that 21% of all 'tourism day visits' (visits taken outside of the participant's usual environment) were to countryside and village destinations (Visit Britain 2018).

Whereas Visit England associate rural tourism with activities which are readily linked with the countryside, the GBTS and GBDVS embrace a broader approach allowing survey participants to select from activities which are equally relevant to urban areas including 'visited friends or family for leisure' and 'went out for entertainment – to a cinema, concert or theatre' (GBDVS 2015). The GBTS and GBTVS therefore embrace both recreation and tourism. Within this domestic context there is little difference between tourism, recreation and leisure activities, tourism day visits being instead defined by time and degree of irregularity. The greatest proportion of outdoor leisure activities (described by Visit Britain as "walking, cycling, golf etc") are undertaken during visits to countryside and village destinations, representing 17% of visitor's main activities compared to 5% for visits to cities and 14% for visits to the seaside. However visiting friends and family represents the main activity for a greater proportion of visitors to all destination types (Visit Britain 2018).

The problem of taking the definition of rural tourism (and recreation) beyond that of 'tourism which takes place in the countryside' was considered in detail by Lane (1994); "not all tourism which takes place in the countryside is strictly 'rural' it can be 'urban' in form, and merely located in a rural area" (Lane 1994, p.9). This is certainly the case for many English Theme Parks which do not fall within the Visit England's definition of rural tourism but are primarily located within rural areas.

Lane (1994) summarises that rural tourism is rarely static or self-contained and rarely free from urban influence. He identifies a continuum to account for the variance from urban fringe to more remote locations and tentatively identifies 'holiday activities which are usually specifically rural' and those which may be 'rural or urban/resort based' and those which are specifically 'urban/resort based'. As such a sliding scale of activities and whether typically rural alongside the relative proximity to urban centres is created.

In respect of transport demand and the potential for transport practices to be sustainable, both the nature of the tourism or recreational activity and the relative remoteness of the location within which the activity is to take place are significant. Whilst overlap must exist between urban and rural settings, it is the features of rural transport networks that present different challenges when seeking to develop sustainable tourism practices, "in simple terms, 'rural' areas define themselves with respect to the presence of particular types of problem" (Robinson 1990 cited in Page and Getz, p4). It is this disparity between rural and urban transport infrastructure which contributes to the differentiation between the demands of rural and urban tourism.

The extent of these challenges is also dependent upon the scale and nature of the demand for rural tourism and the subsequent movement of a predominantly urban based population to and from the countryside on a potentially ad-hoc basis. Estimates provided by the GBTS and GBDVS would suggest around a fifth to a quarter of all Great Britain's domestic tourism is to rural destinations where just 17.6% of the population reside (Defra 2015). Given that over 80% of England's population live in urban areas, this represents movement between urban and rural locations on a very significant scale.

As a further indication of the scale of rural tourism and recreation travel demand, the National Travel Survey estimates for England, that on average 26% of all personal trips in 2017 were related to leisure, based upon similar activity types as used within the GBDVS and GBTS (visit friends at home and elsewhere, entertainment, sport, holiday and day trip), contributing 25% of all annual car driver trips and 40% of all car passenger trips. Leisure trips in 2017 represented on average 41% of miles travelled per person per year (Department for Transport (DfT) 2017). Travel demand for leisure purposes is therefore more significant than for any other purpose, including that of commuting.

2.1.1. Where does rural tourism take place?

Travel to the countryside for tourism and recreation within the UK is not evenly spread across all rural areas but instead focused on countryside attractions, country parks, National Parks and Areas of Outstanding Natural Beauty (AONB).

Determining the scale of visitation to National Parks is reliant on estimates produced by the GBTS and GBTVS and economic models such as STEAM (Scarborough Tourism Economic Activity Monitor). It is estimated that National Parks in the UK host around 172 million visitor days per year (National Parks UK 2015), although as becomes apparent when visitation to the New Forest National Park is explored in more detail within this study, providing a robust and consistent estimation is a complex process. Visit Britain estimate that National Parks in Great Britain host 38 million tourism nights a year based upon an average taken over three years (Visit Britain 2018).

National Parks represent 9.3% of England's land area, 19.9% of Wales' land area and 7.2% of Scotland's land area (National Parks 2015), as such it is to be expected that given their scale and their role in promoting enjoyment, that National Parks in the UK are significant destinations for rural tourism.

Areas of Outstanding Natural Beauty (AONB) also provide a significant focus for rural tourism and recreation within England, Wales and Northern Ireland. There are 46 landscape areas designated to 'conserve and enhance the natural beauty of the landscape' with a secondary aim of 'increasing the understanding and enjoyment by the public' (Countryside and Rights of Way Act 2000). The extent of visitation is not as routinely recorded for each AONB however the Cotswold Area of Outstanding Natural Beauty, the largest of the 46 AONBs, estimated that it received 23 million day trips and a further three million staying nights in 2003 (Cotswold Conservation Board 2010). This would suggest that visitation is on a similar scale to that estimated by STEAM for the Lake District National Park, albeit with variation on what may constitute a visitor day.

2.1.2. Why do people visit the countryside?

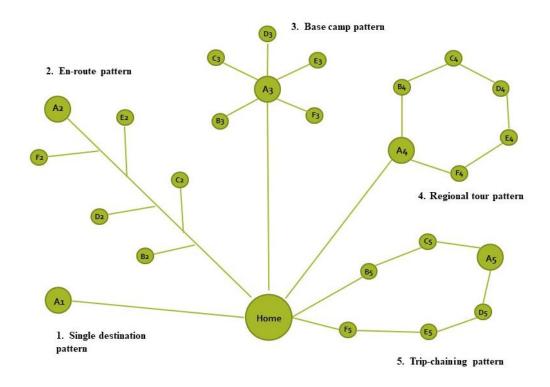
Urry (1990) considers that the 'tourist gaze' seeks landscapes and townscapes which are separate from everyday experiences and "what makes a particular tourist gaze

depends upon what it is contrasted with" (Urry 1990, p2). The dichotomy between rural and urban environments has been identified as a motivation for rural tourism as urban dwellers seek temporary respite from urban stressors such as noise and air pollution (Mace et al 2004). Furthermore, visits to natural areas can provide restorative (Kaplan 1995) and spiritual (Jepson and Sharpley 2014) experiences. Camping is a way of becoming immersed in the physical environment providing for meaningful experiences with nature and an opportunity to disconnect from technology (Hassell et 2015). Although Dickinson et al (2016) describe that despite the emerging backlash against technology within tourism experiences that there is considerable variability in the extent to which tourists actually disconnect from mobile technology. Garst et al (2010) provide a detailed exploration of the meanings associated with modern forest-based camping, concluding that it continues to have a role in personal restoration and in providing an opportunity to experience nature with social interaction largely within the camping group being central to these experiences.

As detailed above, Visit England (2009) identify activities which they consider to be readily associated with rural tourism, however UK Tourism Surveys such as the GBDVS and GBTS show that activities overlap with those of visitors to other settings and that these activities are not exclusively about experiencing rurality and undertaking outdoor activities. The GBDVS summarises that in 2017 the 'main' activity of 24% of tourism day visits made to villages and the countryside was to visit friends and family, compared with 15% of visits which had a focus on participating in outdoor leisure activities (Kantar TNS 2018). Larsen et al (2007, p247) describe the growth in international tourism involving visits to friends or relatives (VFR) setting out that "places can matter in VFR tourism, although differently from more straightforward sightseeing forms of tourism". The use of 'main' activity by GBTS recognises that tourism visits can have multiple motivations and indeed multiple destinations attributable in part to the diverse needs and wants that may exist within visiting groups (Lue et al 1993). For the majority, tourism is not a solitary activity and whether in a rural or urban setting it provides an opportunity for socialising and family togetherness. In the UK, just 14% of domestic tourism day visits to the 'rural countryside' were undertaken alone (Kantar TNS 2018). Rural destination areas therefore provide a setting of special significance for

spending time with others. A rural tourism visit is not necessarily undertaken in isolation and may form part of a wider itinerary. Lau and McKercher (2006, p40) summarise the factors influencing overall tourist movements as relating to "human 'push' factors" such as the composition of the travel party and personal motivations; the spatial and physical configuration of the destination area and the time budget. Lue et al (1993) describe the rationality of inter-destination travel patterns as tourists maximise their investment in time, transportation and accommodation by building in additional stops along the route or from the base of a single main destination, summarising that "there are few instances where attractions stand alone as single destination places without relating to other attractions" (Lue et al 1993, p294). Several studies categorise tourist movement patterns (see Flognfeldt 1999; Oppermann 1995; Lue et al 1993; Mings and McHugh 1992). Mings and McHugh (1993) reviewed the trip patterns of visitors to Yellowstone National Park establishing that only 9.5% of visitors had taken a direct route to the Park without taking 'side trips'. The scale of American geography compared to that of the UK requires a significantly greater investment in time and resources for visits to National Parks. Visitation patterns to Parks in the UK are however influenced by their relative proximity to urban areas with those located closer to cities having a greater propensity for day trips from home and Parks close to coastal destination areas such as the South Downs National Park (South Downs National Park Authority 2012). As such the conceptualisation of trip patterns is applicable to the UK and has parallels with descriptions of trip patterns in more general transport planning contexts such as 'linked trips' and 'pass-by trips' (DfT 2007) and indeed the more compact geography of the UK offers the potential for visitation to be combined with trips made for non-tourism purposes. Figure 1 reproduces the spatial patterns of holiday trips as conceptualised by Lue et al (1993, p294).

Figure 1 Spatial Patterns of Holiday Trips (Lue at al 1993, p294)



2.1.3. Transport Impacts of Rural Tourism

As demonstrated above, National Parks and AONBs represent the most significant focal points for rural tourism and recreation within the United Kingdom. Their designations as National Parks and AONBs requires the protection and enhancement of the habitats and landscapes within their boundaries. The 1995 Environment Act sets out the two statutory purposes for National Parks in England with similar legislation for Scotland and Wales:

"To conserve and enhance the natural beauty, wildlife and cultural heritage of the Park

And

To promote opportunities for the understanding and enjoyment of the Park's special qualities by the public." (Environment Act 1995)

As National Parks carry out these purposes, they have a further duty to 'seek to foster the economic and social well-being of local communities within the national parks' (National Parks UK 2015).

The first purpose of a National Park takes precedence when there is any conflict between the two purposes under the Sandford Principle. However, the Government's 2010 Circular requires that National Park authorities and other bodies make every effort to reconcile any conflicts between the two purposes. The 2010 Circular puts significant emphasis on making tourism sustainable and promoting sustainable transport with the added dimension of providing a showcase for sustainability (Defra 2010).

The transport impact of recreation and tourism within National Parks and AONBs is significant in terms of its contribution to greenhouse gases and direct impacts on the physical environment. Encouraging tourism and recreation within National Parks and AONBs contributes to the purpose of increasing understanding and enjoyment but, in respect of the resulting transport impact, it is in direct conflict with work to conserve and enhance these areas.

The scale of transport demand to and within predominantly rural destination areas such as National Parks is very significant and as such contributes to both localised and global transport impacts.

2.1.4. Climate Change

The transport sector is the second largest contributor of domestic greenhouse gas emissions in the UK with passenger car travel representing 55% of these emissions. In 2016, 17% of all the UK's emissions were attributable to passenger cars (Department for Business, Energy and Industrial Strategy (BEIS) 2018). A study undertaken on behalf of the Lake District National Park estimated that visitor car travel accounted for 23% of the Park's total carbon footprint, although it should be noted that the carbon footprint of visitors arriving by air from overseas was estimated to account for a further 26% of the Park's carbon footprint (Small World Consulting 2010). It should however be acknowledged that international visitors to UK National Parks are likely to be combining this with other destinations and purposes with respect to the growth in visits made to

friends and relatives (Larsen et al 2007). Greenhouse gases attributable to the UK aviation (domestic and international) represented 6% of total emissions in 2010 (Civil Aviation Authority 2017).

Climate change is already having an effect on landscapes and habitats within the UK's National Parks (National Parks UK 2015). One of the identified effects of climate change is that on recreation and tourism with "a potential increase in visitors due to warmer summers in the UK" (New Forest National Park Authority (NFNPA) 2010). Impact assessments undertaken with respect to two Canadian National Parks conclude that climate change could extend the length of the visiting season and therefore increase overall visitation (Scott et al 2007).

Conversely, extreme weather events can cause damage to park infrastructure and as a result affect the availability of visitor facilities and recreational opportunities (Woosnam and Kim 2013). The effects of climate change may also result in changes to the natural environment eventually reducing its overall attractiveness to visitors (Scott et al 2007). Finally changes in weather patterns may affect the quality of outdoor recreational activities such as camping which are traditionally associated with National Parks (Hewer et al 2015). For instance, the UK is projected to experience significant changes in precipitation and extended periods of drought (Met Office, 2018). National Parks are to be exemplars of environmental protection and are called to lead the way in adapting to and mitigating climate change (Defra 2010). This builds upon the statutory foundations of National Park purposes.

2.1.5. Localised Impacts

Long before the environmental impacts of transport emissions were recognised and before extensive growth in car ownership in the UK, concerns over the potential for localised impacts in National Parks were raised within the Dower Report of 1945. The report set out concerns regarding the impact of highway improvements to accommodate visitors at the expense of "landscape beauty, to farming, to peace and quiet of the country and its enjoyment of visitors and residents" (Dower 1945, cited in Cullinane, 1997).

The presence of parked cars within a landscape directly detracts from the perceived pleasantness of a scene (Futers 1994). Furthermore, verges are subject to damage from parked cars and overrunning vehicles. Narrow country lanes do not have capacity to accommodate large numbers of vehicles and two-way movement is often limited resulting in congestion. Congestion, particularly in small villages which act as gateways to National Parks and other rural destinations, reduces the attractiveness of the village itself and impacts upon local air quality.

Noise from traffic reduces tranquillity therefore impacting on the visitor experience. "Where a situation is both visually and aurally pleasant and calming we can expect high levels of tranquillity such as is found in natural environments that are relatively uncontaminated with man-made noise" (Watts and Pheasant 2015, p126). The importance of tranquillity in respect of recreation is recognised within the National Planning Policy Framework (Department for Communities and Local Government 2012) which requires that planning policies and decisions should aim to:

"Identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason."

(Department for Communities and Local Government 2012, p29)

Strategies to safeguard tranquillity are incorporated into National Park management plans, for example, the New Forest National Park Authority seeks not only to maintain tranquillity but also to enhance it (NFNPA 2015). A paradox therefore exists within which visitors act to depreciate the very environment that they have come to enjoy with the transport choices they make.

2.2. Sustainable Transport Provision for Rural Tourism

Facilitating sustainable low carbon transport for those living in rural areas is challenging. Within rural areas it is considered that "access to a car can be crucial in maintaining accessibility" (DfT 2007, p42) and ensuring people in rural areas have access to 'appropriate transport' is also a matter of social equity. However higher levels of car dependence within the resident rural population means a higher proportion of transport carbon emissions are produced compared to other sectors of the population. Residents

living within areas classified as 'Rural Village, Hamlet and Isolated Dwellings' on average drive two and a half times as many miles per year than their counterparts residing in an 'Urban Conurbation' (DfT 2017).

In rural destination areas such as National Parks, transport infrastructure must provide access for both residents and visitors, however transport policy typically overlooks the additional demands of tourism on rural transport infrastructure. "Rural transport needs to consider both the people who live in rural areas and those who visit rural areas for leisure and recreation. The needs of the two groups are likely to be quite different and this will need to be reflected in policy" (Cullinane 1998, p70).

2.2.1. Public Transport

The origins of rural tourism in Great Britain are closely linked with the development of the railways in the 1800s. "Direct rail links between large cities and areas already known for their scenic beauty encouraged short-stay excursions, including day trips" (Patmore, 1970, p292 in Hudson, 2001). Previously largely inaccessible beauty spots were opened up to visitation and led to the expansion of tourism services in remote areas. Hudson (2001) describes how the 'remote spot' of Goathland and the nearby waterfalls only became popular following promotion of the Whitby and Pickering Railway. This railway now forms part of the North Yorkshire Moors Heritage railway within the North York Moors National Park.

Many of the branch lines which originally opened up the countryside to tourism have since been closed or operate only as heritage railways, as such the rail network now provides for reduced access to the rural tourist destinations that it originally helped to create. "As a result of the programme of closures undertaken following the 1963 Beeching Report, the local and regional rail networks are thin, though increasingly well used" (DfT 2007, p51). The operation of many remaining branch lines is supported by Community Rail Partnerships, these are not for profit organisations with some reliance on Government subsidy.

Rural railways are considered to play a vital role in enabling residents of rural areas to access local towns and as a convenient mode of travel for tourism; "Rail provides access not only for visitors who stay overnight but also for day-trippers from larger towns or cities. Perhaps most importantly, particularly for lines serving national parks, areas of outstanding natural beauty, seaside towns and historical sites, these railways are a sustainable mode of public transport for tourists" (Strategic Rail Authority 2004, p4). "The seasonality of passenger figures on branch lines implies the importance of tourism to branch lines and vice versa" (Dallen 2007, p181). Dallen's (2007) survey of users of the Looe Valley Line in Cornwall during the first week of the summer holidays found that 63% of journeys on the line were tourism-related. Some mainline rail services also pass through rural destination areas however stops at smaller stations are more limited providing for an infrequent service.

Bus service provision in rural areas can both require high subsidy and be inefficient in climate change terms because of the low loading of vehicles (DfT 2007). In recent years local authority budget cuts have threatened commercially unviable bus routes in towns and rural areas (Institute for Public Policy Research (IPPR) 2015) and the focus has shifted towards community transport and demand responsive transport to meet rural accessibility requirements.

Whilst the role in supporting local labour markets, local economies and services and the potential for buses to ease congestion and reduce emissions is recognised (IPPR 2015), limited attention is given within policy to the role of buses in supporting tourism.

A small number of studies have however demonstrated the positive role of buses in reducing car use at tourist destinations and increasing leisure opportunities for people without cars. The 'Tourism on Board' survey was conducted on scheduled buses within 18 tourist areas, including nine National Parks. Guiver et al (2007) found clear evidence that services helped to reduce car use whilst identifying where improvements should be sought to meet the needs of visitors. The survey found that 30% of the passengers had a car available to them on the day they used the bus and an additional 8% were on holiday without their car. A study of users of the Greater Manchester Wayfarer ticket showed that 43% of users had access to a car (Lumsdon et al 2006).

Guiver et al (2007) assert that the provision of bus services is partly justified with respect to their role in enabling access to rural areas for people without cars. Most survey

respondents within their study (71%) did not have a car available to them of which 60% did not own a car.

Concentrations of households without a car are higher in urban areas but these households are generally less likely to visit the countryside (Guiver et al 2007). The 2011 Census recorded that 42% of households in the London Region did not have access to a car or van and 26% in England as whole, an increase in the proportion of households without cars of 5% and 1% respectively, compared to the 2001 Census (ONS 2015).

An over-representation of older people compared to the general population is evident within studies of use of bus and rail services within destination areas (Lumsdon et al 2006; Guiver et al 2007). Almost three quarters of users of the Greater Manchester Wayfarer ticket within the survey sample were aged 55 and over with 65% of tickets purchased being concessionary (Lumsdon et al 2006).

Passengers reported the act of travelling (by bus, train and tram) 'was in itself an enjoyable activity' (Lumsdon et al 2006). Guiver et al (2007) consider that the intrinsic value of leisure travel represents one of the key areas where leisure travel differs from travel for utilitarian purposes such as commuting. Analysis of visitor attitudes indicates "a willingness to respond to public transport when it is perceived as a leisure activity in its own right" (Eaton and Holding, p63, 1996). "Rural transport and infrastructure (bus, rail and boat services; public footpaths and rights of way, bridleways, national trails and cycle paths)" are included within Visit England's list of 'rural tourism assets' (Visit England 2009) acknowledging these intrinsic benefits and the role of transport as an attraction within the rural tourism setting.

However, not all public transport services were observed to capitalise on the visitor's desire to include the journey as part of their overall recreational experience. Downward and Lumsdon (2004) noted the impact of restrictive bus scheduling on the visitor day and the potential consequence on visitor spending. Visitors cited unreliability, poor information, discourteous staff, bad driving and the use of inferior vehicles as areas where bus services could detract from a day out (Guiver et al 2007).

The potential for bus services to engage with visitors to enhance the visitor experience is more recently being recognised and capitalised upon (Guiver et al 2015).

There are presently numerous examples of scheduled bus services operating in National Parks and AONBs which have sought to address some of the issues identified by earlier researchers. In 2015 the New Forest National Park Authority published the 'Visitor Bus Toolkit' to share best practice based upon the experience of the development of visitor bus services in seven National Parks in England and Wales. The Toolkit sets out that "the best visitor buses turn the journey into an attraction in its own right – with friendly drivers, scenic routes, panoramic windows and links to walks and attractions, as well as discounts and incentives to reward travellers" (NFNPA 2015, p5). Marketing is one of the key 'tools' within the kit with the creation of catchy names for services (e.g. Coasthopper, Snowdon Sherpa, Puffin Shuttle) alongside consistent branding and incentives such as discounted entries to attractions.

2.2.2. Walking and Cycling

Largely due to the lack of amenities within walking distance and poorer transport infrastructure, people living in rural areas make fewer trips on foot and by cycle (Hutchinson et al 2014). Conversely, walking and cycling are popular pastimes for visitors to rural destination areas. Walking is identified as the most popular activity amongst visitors to National Parks (National Parks UK, 2015) and paths and tracks are an important countryside asset (Visit England 2009).

Guiver et al (2007) identified that people visiting rural destinations for the purposes of undertaking a recreational walk were represented as one of the main bus-user groups, with buses providing the opportunity to undertake linear walks. Davies and Weston (2015) considered the potential for organised walking groups to switch from cars to public transport to reach the starting point of the walk noting that on reviewing programmed walks scheduled by walking groups, only 10% of the scheduled walks involved travel by train and just 1% were linear walks facilitated by bus travel but that potential existed to increase the use of public transport. Several National Park authorities have developed walking routes and guided walking events which readily tie in with local public transport services.

Cycling on rural 'A' roads is significantly more dangerous than any other road type in the UK where cycling is permitted, with eight times the national average risk of fatality per kilometre travelled (Wardlaw 2014). Most of the rural road network is subject to the national speed limit of 60 mph on single carriageway roads, and 70 mph on dual carriageways. However, the characteristics of the road, particularly on 'C' roads and unclassified roads means that many drivers are travelling below the speed limit. "Inappropriate speed, at levels below the legal limit but above those appropriate for the road at the time (for example, because of the weather conditions or because vulnerable road users are present), is a particular problem for rural roads" (DfT 2013, paragraph 113).

The abundance of unclassified and lightly trafficked roads passing through the UK's rural areas has been exploited by Sustrans with some roads where vehicle flows are typically less than 1000 vehicles per day being incorporated into National Cycle Routes (Sustrans 1997). The guidance acknowledges the variability of driver behaviour on minor rural roads and considers the most effective measure to be the closure of the road to motorised traffic. Traffic is a major deterrent for all but the most committed cyclists and those with a generally low level of cycling experience are drawn to traffic-free routes (Pooley et al 2011, Downward and Lumsdon 2001).

Examples of road closures within National Parks include a five-mile stretch of single-track road on the western bank of the Upper Derwent and Howden Reservoirs in the Peak District National Park. This is closed to general traffic at weekends and on Bank Holidays. This stretch of road can be observed to be utilised by a wide range of cyclists including families with young children.

The closure of railway branch lines has provided further opportunities for the development of traffic free routes or greenways. These routes are the focus recreational cycling with associated bicycle hire facilities providing the chance for non-cycling visitors to try out cycling. "Converted disused railway-lines are popular as they offer moderate slopes and a variety of vistas from cuttings, embankments and viaducts, and are generally constructed as greenways exclusively for non-motorised users, cyclists, walkers, horse riders, disabled users" (Weston et al 2015).

However, greenways such as those created along the track-bed of disused railways are linear and access is via the existing highway network which for less-experienced cyclists is not an attractive option. Therefore, such routes generate vehicular traffic movements. Connections with bus and rail services have been explored, for example the New Forest Tour allows the carriage of bicycles on board and the Peak District National Park Authority is seeking to encourage more multi-modal journeys with the extension of the High Peak and Monsal Trails. Although the potential for access to the route by rail is limited by bike load capacity of trains which each carry just two cycles (Weston et al 2015).

2.2.3. Traffic Management

The provision of public transport services, footpaths and cycleways alongside promotional measures represent the 'pull' measures (carrots) available to entice visitors from using cars to travel to and within rural destination areas (Cullinane 1997). More recently and in wider transport policy, the use of marketing, information and 'tailored' new public transport services are described as "'soft' factor interventions or 'smarter choice' measures or 'mobility management' tools" (Cairns et al 2008, p594). Cairns et al (2008) consider that the effectiveness of soft measures relies upon the "consistent application of soft and hard" and that "inconsistent or partial application could substantially undermine the likelihood of having positive effects" (Cairns et al 2008, p617).

Since the creation of National Parks, official committees have advocated the adoption of "stringent traffic management measures" (Cullinane 1997, p277). Despite this there are limited examples where traffic management measures have been implemented in National Parks or AONBs. Where measures have been implemented, they could not be considered as 'stringent' but instead are represented by parking charges, vehicle weight and speed restrictions with just a small number of isolated roads being closed to general traffic. A number of studies conclude that within such rural destinations 'carrots' must be accompanied by 'sticks' to deter car use and to shift car-users to public transport and other sustainable modes (Cullinane et al 1996; Cullinane 1999). Steiner and Bristow (2000) identify a hierarchy of measures in terms of their effectiveness at

reducing car use for travel to National Parks and their further benefits of reducing traffic nuisance at the destination with road closures and road user charging providing for the greatest scope for change.

Attempts to implement traffic management schemes in National Parks generally face local opposition, largely from the local population with fears of loss of tourist revenue and reduced mobility within their local area (Cullinane 1999; Holding and Kreutner 1998). However, examples of car-free resorts in Switzerland show that visitor numbers have been maintained or even increased. Furthermore, the absence of vehicles can in itself be an attraction (Holding 2001). Closure of roads in the Goyt Valley, within the Peak District National Park initially resulted in a drop in visitor numbers but after a period of time visitors adapted and numbers increased (Cullinane et al 1996). This adaptation was also observed within the Zion National Park in the USA where the decision was taken to close Zion Canyon to private vehicles with a shuttle bus service instead facilitating access. Within Zion National Park visitor satisfaction increased once the shuttle system was established (Mace et al 2013) an experience observed in other locations including Denali National Park (Holly et al 2010).

Where roads have been closed to general vehicular traffic (albeit, on Sundays and Bank Holidays only) the benefit to pedestrians and cyclists can be readily observed, however the closures do little to reduce the proportion of visitors arriving to the area by car. For example, the Goyt Valley scheme provided 'a very successful park and walk scheme' (Cullinane et al 1996). Steiner and Bristow (2000) found that road user charging supported by park and ride services had the potential to significantly reduce traffic volumes in the UK's National Parks without a detrimental financial impact however no such schemes have been developed and there are also no examples of schemes to restrict traffic movements across a wider rural destination area.

'Soft' measures have however been widely employed within both urban and rural transport settings. Such measures present less of a challenge to the status quo of car dominated environments and reflect a neo-liberal approach to policy making (Jones et al 2011). For instance, the coalition Government readily embraced 'Nudge Theory' (Thaler and Sunstein 2009) with its potential to affect change without removing choice or the need to deliver significant economic incentives to perform the preferred behaviour.

Implementing 'hard' measures to support transport mode shift is costly and can meet resistance especially when the proposed change to infrastructure reduces the existing freedoms enjoyed by car drivers. However, the effectiveness of Nudges and other approaches addressing psychological factors has been called into question. The House of Lords Select Committee Review concluded that there was insufficient evaluation of policy interventions which focused on behaviour change (House of Lords 2011). Attempts at evaluating the relative success of 'soft' measures in transport refer to the problem of distinguishing effects which result from these measures in isolation of wider changes to transport pricing and infrastructure. For example, Cairns and Jones (2016, p43) highlight the challenge of isolating the effects of smarter choice measures with respect to the Sustainable Travel Town programme citing how local contexts comprise of a "specific combination of geography, socio-economic demographics and transport options" and acknowledging how wider changes taking place potentially would have also influenced mode choices. Similarly, an evaluation of the Travelling to School Initiative Programme undertaken by Atkins (2010) identifies parent's concerns about safety on the journey to school making them reluctant to let their children travel independently whilst being unable to switch to active modes due to work commitments as 'perceived barriers'. Increasing awareness of the benefits of active travel was considered a "key response" to these issues (Atkins 2010, p62) rather than the consideration of the extent to which parent's working practices limit the actual scope of awareness campaigns to affect change.

Summary

In the UK, rural tourism is focused within rural destination areas such as National Parks and AONBs, the special characteristics of which are actively promoted for the enjoyment of the public. Rurality, and what constitutes rural tourism exist on a sliding scale with some destination areas better connected and in closer proximity to population centres than others. Rural destination areas are principal sites for taking part in outdoor activities which provide opportunities to connect with the natural environment, however, for the majority, social interaction is fundamental to these experiences and National Parks and AONBs provide an important setting for the togetherness of tourism. Visits to these

areas are not necessarily made in isolation and therefore visits may be linked to other tourism and non-tourism purposes which has implications for mode choice. The primary purpose of National Parks and AONBs lies within conservation and protection of the natural environment and visitation on a large scale contradicts with this purpose with the use of transport to access and move around these areas contributing to global and local environmental impacts which ultimately detract from the visitor experience. Measures to address visitor car-use are shown to have potential to achieve modal shift but their isolated implementation, the provision of 'carrots' in the absence of 'sticks', has resulted in the perpetuation of car-use on a damaging scale.

3. SOCIAL PRACTICE THEORY

Introduction

Over the last decade there has been a call for a shift in focus in both transport and tourism studies. The 'critical turn in tourism studies' as described within Ateljevic et al (2007) argues for "less economic determinism (or 'bums on seats' rationale) and more engagement with the embodied and emotional, discursive and ideological characteristics of tourism and travel" (Matthews 2012, p1). Similarly, within transport studies there has been a growing acknowledgement of the limitations of mainstream theories such as the Theory of Planned Behaviour (Azjen 1985) which focus on the individual as the point of decision, with a call to explore the wider potential of sociological perspectives (Cairns et al. 2014; Marsden et al. 2014). Shove argues that the dominant paradigm of 'ABC – Attitude, Behaviour and Choice' creates a "blind spot" in our understanding and therefore limits the effectiveness of policy responses to environmental challenges (Shove 2010, p1277). This blind spot results from the extraction of individual behaviours from their wider social context, as such the conditions within which a behaviour or activity takes place are unaccounted for (Shove 2010; Barr and Prillwitz 2012; Marsden et al. 2014) with little recognition of where behaviours are 'locked-in' (Hall 2013). Shove seeks to "shift the focus away from individual choice and to be explicit about the extent to which the state and other actors configure the fabric of everyday life" (Shove 2010, p1218). This more recent discourse echoes earlier criticisms of social theories that overemphasised the "deterministic role of social structure in influencing behaviour (such as functionalism) or posit a free, decision making individual relatively unencumbered by social structure" (Giddens in Tucker 1998, p2) representing an 'actor-structure dualism'. Gidden's Theory of Structuration places the focus of sociological study on 'social practices' rather than the experiences of individual actors or as a reflection of a form of 'social totality' (Giddens 1984, p2).

Adopting a Social Practices perspective enables social and physical context to be integrated into the analysis. A focus on 'practices' sees changed groups or 'bundles' of activities as the ultimate goal (Schatzki 2003) and provides a pragmatic approach that considers behaviours as the physical manifestation of practices (Chatterton and Wilson

2014). Social Practice Theory therefore represents an approach to research from a realist philosophical position; an approach which recognises the embeddedness of human action: "Human actions can only be understood in terms of their place within different strata or layers of social reality" (Robson 2002, p38).

3.1. Limitations of the Theory of Planned Behaviour

For Shove (2010) the focus on desires and attitudes as key drivers of behaviour omits the opportunity to understand how behaviours are shaped by the context of daily life and the environment within which actions are played out. This 'blind-spot' is readily identified and acknowledged within the Theory of Reasoned Action and the subsequent Theory of Planned Behaviour (Ajzen 1985). The Theory of Reasoned Action specifically seeks to consider actions which are under "volitional control" (Ajzen 1991, p181) and self-imposes limitations on the range of its application: "it's ability to predict and explain human behaviour will be greatly impaired whenever non-volitional factors exert a strong influence on the behaviour in question" (Ajzen 1985, p18). Ajzen further discusses the question of volitional control with respect to the development of the Theory of Planned Behaviour, identifying factors or characteristics which affect the extent to which an individual is able to enact an intended preferred behaviour. External factors include 'time and opportunity' and 'dependence on others' both of which represent pertinent areas when analysing transport use. Time, its availability (and therefore opportunity), is a key consideration in transport mode choice. The previous chapter highlights the intrinsic value of transport use within a leisure context and personal time budgets are further determined by wider goals and structures. For instance, life-stage dictates the availability of time as a resource with respect to the complexity of tasks and demands and therefore impacts on transport decision making. For example, Dobbs 2005 demonstrate how the need to undertake more complex journey patterns and linked trips associated with parenthood (or more specifically in this study, motherhood) necessitates car use and Chatterjee et al (2018) identify how wider social factors explain the reduction in car use amongst younger adults. 'Opportunity' can be interpreted as the availability of transport resources with, for example, marked differences between rural and urban transport infrastructure. Alternatively, cost may also dictate the degree of volitional control in transport mode choice (Mattioli 2016). Furthermore, transport use is not always an individual endeavour. Tourism in particular is shown to rarely be a solitary pursuit and factors influencing tourist movements and therefore their transport choices relate to the whole travel party (Lau and McKercher 2006) just as escort trips (for example accompanying a child to school) are by their very nature undertaken with others. Therefore 'dependence on others is likely to significantly affect the degree of 'volitional control' over transport behaviour. Azjen (1985) also identifies 'information, skills and ability' as factors internal to an individual which may further limit the degree of volitional control available. Within the context of transport use, these factors are arguably external with the wider environment within which transport is used determining the level of skill required. It nevertheless represents a significant determining factor in how transport is used, the impact of which is amplified with respect to the need to consider others in these choices.

The Theory of Planned Behaviour doesn't account for these limiting factors as the theory requires that intention is the precursor to enacting a behaviour and that these are absent if a goal is known not to be possible (Ajzen 1985). There is therefore an absence of understanding of what is not reasonably possible within this theory. In transport studies this represents an absence of understanding of the barriers and structures which may initially determine transport mode choice. In the face of these barriers or predeterminants of volitional control the role of attitudes and subjective norms in explaining behaviour is redundant. Furthermore, transport use is not necessarily the behavioural goal but rather the means to achieve a wider aim requiring that attention is broadened to consider the wider set of behaviours or activities which the transport use facilitates. A focus on the role of attitudes and subjective norms in determining behaviour is therefore only appropriate when a realistic or reasoned choice exists. This is a clear caveat of Ajzen's theory. These factors remain relevant in understanding behavioural choices but must represent a later stage of analysis undertaken once the extent of available volitional control has been identified. The primary challenge therefore lies in determining where and how choices are blocked. Transport choice making is highly contextualised with geographical variation in transport provision, variation within the population in the availability of the required skills and resources and further variability in the role of transport in achieving wider aims. Moreover, a focus on behaviour overlooks the potential for changes to the activities that transport facilitates. Shove (2010, p1273) describes the need to develop "new forms of living, working and playing" to address the challenge of climate change. In a transport context such changes may relate to non-transport activities to bring about reductions in the need to travel or a reduction in travel distances. Taking practices as opposed to individual behaviours as the unit of analysis provides the opportunity to reveal the wider possibilities for enacting desired changes.

3.2. Concepts of Social Practice Theory

3.2.1. Definition of a Practice

Reckwitz (2002) provides an elaboration of the main characteristics of 'Practice Theory', positioning it within 'cultural theory' and therefore differentiated from the actor-structure dualism of classical social theories. Within 'Practice Theory', practices are the unit of analysis. A practice is defined as:

"a routinized type of behaviour which consists of several elements, interconnected to one other; forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge."

(Reckwitz 2002, p249)

This definition is broken down into its constituent parts of body, mind, things and knowledge. "A social practice is a 'regular, skilful 'performance' of (human) bodies...These bodily activities then include also routinized mental and emotional activities which are — on a certain level — bodily, as well" (Reckwitz 2002. p251). "Carrying out a practice very often means using particular things in a certain way...most social practices consist of routinized relations between several agents (body/minds) and objects" (Reckwitz 2002. p253). Practice theory "embraces ways of understanding, knowing how, ways of wanting and of feeling that are linked to each other within a practice" (Reckwitz 2002. p253).

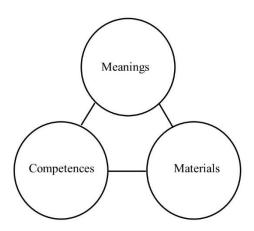
Reckwitz (2002, p250) conceptualises individuals as bodily and mental agents who act as 'carriers' of practice. Describing how the individual is "not only a carrier of

patterns of bodily behaviour, but also of certain routinized ways of understanding, knowing how and desiring". These elemental qualities are therefore the qualities of the practice rather than the individual who is instead the 'carrier' of the practice. 'Practice-as-performance' is the observable behaviour of individuals or carriers. A 'practice-as-entity' exists even if it is not being performed by carriers and in this way can have an ongoing existence or trajectory (Shove et al 2012). Mallers and Strengers (2013) build on this passage of practices through time with the idea of 'practice memory' to explain how practices thought to be forgotten are resurrected.

3.2.2. The 3 Elements Model

Shove et al (2012) simplify Reckwitz's definition of a social practice by proposing the '3 elements model' consisting of materials, competence and meanings. elements model asserts that materials, competences and meanings are interdependent and mutually shaping and that practices exist when these three elements are integrated. Practices depend on specific combinations of the three elements and these combinations change as practices evolve. Shove considers the possibility that practices are dependent upon interrelations between these three elements and theorizes that "if specific configurations [of practices] are to remain effective, connections between defining elements have to be renewed time and again" (Shove, 2012. p24). This idea is explored in view of its potential for identifying how changes in practice can be brought about by understanding how links between elements of a practice are made and broken. This is further elaborated upon with the idea that "diverse elements circulate within and between many different practices, constituting a form of connective tissue that holds complex social arrangements in place, and potentially pulls them apart" (Shove, 2012. P36). Therefore, practices do not exist in isolation, but they co-exist and co-evolve with other practices. Figure 2 shows the 3-elements model.

Figure 2 The 3-Elements Model (Shove 2012)



3.2.3. Materials

Reckwitz (2002, p252) identifies the role of 'things' in the performance of practices; "Carrying out a practice very often means using particular things in a certain way". Schatzki also identifies that practices are interwoven with objects (2003). Warde (2005) further argues that most practices require and entail consumption. More specifically, tourism travel practices depend upon transport infrastructure; for instance, before the creation of the railways, the countryside was largely inaccessible and rural tourism travel practices were undeveloped. Within the 3 elements model, materials are summarised as "objects, infrastructure, tools, hardware and the body itself" (Shove et al. 2012, p23).

3.2.4. Competences

Competence encompasses know-how and background knowledge alongside 'practical knowledgeability'. 'Practical knowledgeability' can be described as knowledge which can be applied in the production and reproduction of practices. Giddens (1984, p21) describes this knowledge as being "practical rather than theoretical...it provides for the generalized capacity to respond to and influence an intermediate range of social circumstances". Competence refers to having the ability or skills to perform a

practice, competence therefore accords agency which "refers not to the intentions people have in doing things but to their capability of doing those things in the first place" (Giddens 1984, p9) as such the ability or agency to perform a practice is dependent upon competence. The 'body itself' is identified as a material element although clearly overlap must exist between physical capability and competence.

3.2.5. Meanings

Giddens asserts that meaning is bound up with practical activity in the real world (Tucker 1998, p79). Within the model, the element of 'meaning' represents the social and symbolic significance of participation in a practice. Meaning is integral to the practice rather than an external "motivating or driving force" (Shove et al 2012, p24).

3.3. Applying Social Practice Theory

A social practices approach offers the ability to reconceptualise and reframe a sustainability problem, with the aim of presenting a different problem framing than one that begins with observable behaviour (Strengers and Maller 2015). Spurling et al (2013) provide a framework for 'interventions in practice' and use existing scenarios to demonstrate the scope that taking a practice perspective could have in bringing transitions in sustainability. They identify three typical problem framings within current policy (innovating technology; shifting consumer choices and changing behaviour) before applying three further framings adopting a social practice perspective (re-crafting practices; substituting practices and changing how practices interlock). In summary:

"Problem framings have implications for what are viewed as plausible and possible targets of intervention. Understanding the logic of problem framings, and being able to identify them, enables policy makers to see clearly how they constrain or enable options."

(Spurling at al 2013, p14)

Social practice framings are reviewed alongside existing policy approaches with respect to the decarbonisation of road transport drawing on the findings of The King Review (2007). Problem framings focusing on innovations in technology (primarily

more fuel-efficient vehicles) and shifting consumer choice and behaviour were considered "to encourage the persistence of the problematic practices they claim to allay" (Spurling et al 2013, p32), whereas the social practice framings provided for the identification of substitutable practices, the recruitment and defection from practices and where mobility interlocks with other practices, suggesting that intervening in private car use would require a multi-disciplinary approach which addressed the spatial and temporal organisation of practices.

Where academic discourse within tourism mobility and transport draws upon social practice theory it is largely as a similar re-framing exercise as detailed by Spurling at al (2013). For example, Spotswood et al (2015) re-examine data from an earlier study to provide for an alternative means of understanding utility cycling. Their disaggregation of this previous research is used to identify the elements of the practice with the findings reiterating the need for an interdisciplinary approach when seeking transition to more sustainable transport. Cass and Faulconbridge (2016) use practice theory to identify the elements associated with commuting by bus, car and cycle, drawing on qualitative data collected from participants describing their commuting practices. Their study highlights how commuting practices interlock with other practices and that the sequence of these other practices generates temporal and spatial influences on commuting mode choice, suggesting that "transport policy needs to be about non-transport practices which have implications for mobility demand and the possibility of low carbon commuting" (p10). Hui (2012) considers the existence of mobilities within the 'non-transport practices' of patchwork quilting and bird watching, arguing that travel is a consequence of practices. The portability of objects used within practices actively shapes mobility patterns: "moments of consumption within leisure performances are therefore connected to the consumption within mobile practice networks, together forming symbiotic chains" (p211). These two studies highlight how transport use can be examined either starting with specific transport practices or by focusing on non-transport practices and the role of mobility within them.

3.3.1. Rural Tourism as a Social Practice

This study provides the opportunity to explore the practices that are associated with rural tourism with the benefit of data collected specifically to support this endeavour. With reference to existing literature it is possible to begin to identify elements and reframe rural tourism as a social practice with a view to understanding where sustainability conflicts may exist.

Transport infrastructure is necessarily interwoven with rural tourism visiting practices. Rural transport provision differs from urban networks with significantly reduced bus and rail access, particularly to remote locations where many recreational activities associated with rural tourism take place (e.g. hill walking, climbing). This remoteness or inaccessibility arguably contributes to the attractiveness of the location (and therefore the meaning of the visit). Furthermore, features of rural transport may be actively sought providing for a novel travel experience. Within rural tourism areas, transport infrastructure can be considered as an asset which contributes to the overall attractiveness of the destination. However, the absence of public transport services limits accessibility for non-car users unevenly distributing competences for undertaking visits. Where bus and rail services are available their use can bring intrinsic significance creating a leisure experience generating additional or different meanings compared to public transport use in other contexts. Outdoor pursuits are readily associated with rural tourism and these pursuits may require specific materials which in turn demand the use of specific modes of travel. Outdoor recreation is not readily available to everyone, fitness and physical ability or access constraints may limit participation in the practice or result in alternative or adapted practices. Distance can be represented both in terms of materiality and meaning. Destinations need to be far enough from home to provide for the exceptional experience that is essential for a tourism visit ('outside of one's usual environment'). Distancing is also required from the urban environment as visitors seek rurality, but at the same time there is a need to optimise leisure time with day visits being largely focused on destination areas within closer proximity to larger urban centres of population. Rural tourism centres around a desire to experience a 'rural idyll' or to achieve greater contact with nature and transport use has the potential to either enhance or detract from these integral meanings with respect to the extent that its physical manifestations fits with these ideals.

This initial framing of rural tourism as a practice highlights the complexity of transport use in this context. Transport can represent both material and meaning elements within rural tourism. It provides for access but may also form part of the leisure experience. The material availability (or unavailability) of different transport provision both to and within a rural destination area impacts on recruitment to associated practices. Beyond the physical ability to access and use transport, practical knowledgeability is less apparent. Existing literature also presents limitations in identifying variations in rural tourism visiting practices and where practices intercept.

4. THE NEW FOREST NATIONAL PARK

Introduction

This chapter provides a comprehensive understanding of transport provision in the New Forest alongside its wider context in terms of policy requirements and its existing visitor base. The form that transport provision takes in terms of its physical provision and supporting structures such as pricing and ticketing, represent the material elements of visiting practices within the New Forest National Park and the existing visitor base represents the carriers of these practices in their current form. As such an understanding of provision is central to the understanding of rural tourism practices within the New Forest.

4.1. Geographical and Political Context

4.1.1. Location

The New Forest National Park is in the south of England, largely within the county of Hampshire although crossing into Wiltshire in the north and Dorset in the west. The Solent estuary is to the east of the Park with the villages along the western banks of the estuary being just outside of the Park's boundary. The A326 provides much of the Park's boundary on the eastern side with Totton to the immediate east forming an urban area which is then almost continuous with Southampton, the city centre being just 4km from The Park's coastline starts within the southern part of the estuary continuing along the south, encompassing the marshes around Keyhaven. The town of Lymington lies outside of the Park boundary but is effectively surrounded by the Park on three sides. To the west of Lymington, New Milton, Walkford, Everton and the coastal villages of Milford on Sea and Barton on Sea form a buffer between the Park to the north and the coast. The town of Ringwood abuts the western boundary of the Park with Blashford Lakes Nature Reserve to the north of Ringwood. The northern boundary of the Park is largely rural consisting of open countryside and small villages. Figure 3 shows the National Park boundary.

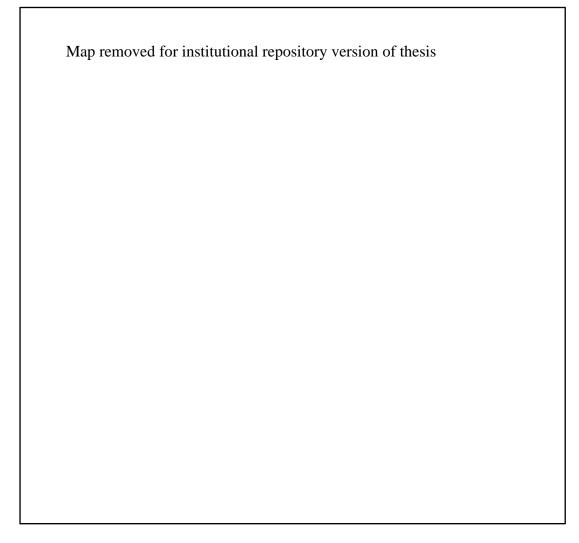


Figure 3 Map of the New Forest National Park

4.1.2. Policy Context, Statutory Frameworks and Conservation Designations

The Park therefore falls into three counties and includes two district planning authorities, all of which function as statutory bodies. In addition, various other designations within the Park warrant the involvement of further Government agencies alongside the NFNPA and the Verderers (whose statutory status and function is outlined later in the section). 47% (26,756ha) of the total area of the New Forest National Park comprises of Crown Lands. The Crown Lands of the New Forest have been managed by the Forestry Commission, on behalf of the Secretary for State, since 1924. The Forestry Commission being a UK Government department responsible for the protection of woodlands. The remainder of land within the National Park is privately managed. The duty of the Forestry Commission is defined within the Forestry Act of 1967, later

amended by the Wildlife and Countryside (Amendment Act 1985) formalizing the balance between conservation of the environment and the forest:

"(3A)In discharging their functions under the Forestry Acts 1967 to 1979 the Commissioners shall, so far as may be consistent with the proper discharge of those functions, endeavour to achieve a reasonable balance between—

(a)the development of afforestation, the management of forests and the production and supply of timber, and

(b)the conservation and enhancement of natural beauty and the conservation of flora, fauna and geological or physiographical features of special interest."

Under the 1925 Property Act, most of the Crown lands of the New Forest are subject to open access on foot and by horseback and Crown lands under freehold are subject to the Countryside and Rights of Way Act of 2000. The management of visitors to the Forest for recreation within almost half of the New Forest National Park is part of the existing remit of the Forestry Commission with detailed policies on access and recreation in respect of Crown Lands set out within the Part B of the 'Forestry Commission (New Forest) Management Plan. Policy B7-11 makes a commitment to reduce the impact of traffic on the Crown Lands of the New Forest:

"Policy B7-11: We will work to minimise the impact caused by road traffic on the Crown Lands and work in partnership with others to encourage the use of public transport and other initiatives to minimise car use."

Part B. Policy B7-11. (Forestry Commission 2008)

The creation of the New Forest National Park in 2005 introduced a wider requirement to 'promote understanding and enjoyment' of the Park's special qualities as part of the two broader purposes of all National Parks:

"to conserve and enhance the natural beauty, wildlife and cultural heritage of the Park"

And

"to promote opportunities for the understanding and enjoyment of the Park's special qualities by the public."

(Environment Act 1995 Section 61)

The Act requires that 'relevant authorities must have regard to the purposes of National Parks when 'performing any functions in relation to, or so as to affect, land in a National Park.' Where there appears to be a conflict between the two purposes greater weight is to be given to that of 'conserving and enhancing'. The NFNPA has the overarching role of ensuring that the purposes of the Park are provided for. To achieve this, they must work in partnership with other organisations holding statutory powers. In addition to the Forestry Commission these include the New Forest District Council; Test Valley Borough Council; Hampshire County Council; Wiltshire Council; Highways England; English Heritage; Natural England and the Verderers of the New Forest.

The Verderers play a unique role within the New Forest which is not replicated elsewhere within Britain. The Verderer's Court was reconstituted under the New Forest Act of 1877 and the New Forest Act 1949 further defines the powers held by the Verderers as a statutory body with duties specific to protecting and administering commoning in the New Forest. Under the 1949 Act the Minister of the Verderers has the power to grant licences including those for the provision of rights of way, car parks and camping sites.

By virtue of the 1949 Act, the Verderers can therefore also refuse to grant licences and by exercising this power have had a very significant influence on the development of recreational routes for cyclists within the Forest and the level and style of signage provision.). The Verderers have adopted a wider protective approach to their administrative duties with the view that this ultimately protects the practice of commoning within the Forest. Commoners of the New Forest are afforded rights over the Forest attached to the land or property which they occupy. These rights include the right to pasture which allows commonable animals (ponies, cattle, donkeys and mules) to graze across the Forest. The commoning system and the 'iconic New Forest pony' (small horses that graze freely across the park) are identified as two of the 'special qualities' of the New Forest:

"The special qualities of the New Forest are those qualities that define it, make it unique and immediately recognisable and, when taken together, distinguish it from all other parts of the country. These qualities are fundamental to the two purposes of the National Park and are the underlying reason for its designation."

Whilst the protection of the natural environment, wildlife, flora and fauna of the New Forest is a common aim of the Forestry Commission, the National Park Authority and the Verderers in respect of an overarching desire to maintain the special qualities of the New Forest, it is Natural England that has a statutory responsibility for protecting and enhancing the natural environment, in particular, the sustainable management of designated nature conservation sites. The New Forest is subject to several conservation designations, including 20 Sites of Special Scientific Interest (SSSI) which includes the New Forest SSSI which alone covers 29,000 ha. The New Forest SSSI is also a Special Protection Area because of the number of rare and vulnerable birds supported by its habitats and is also a RAMSAR site (a wetland of international significance) in respect of its rare plant and invertebrate species. Special Areas of Conservation (SAC) are designated under the European Commission's Habitats Directive. The New Forest SAC encompasses 29,262 ha and includes most of the unenclosed forest and Inclosures (areas of woodland within the Crown lands which are fenced to prevent grazing). As such, more than half of the New Forest National Park is subject to a conservation designation. In addition, the New Forest also has an extensive and unique historical and archaeological heritage which includes 214 Scheduled Ancient Monuments (10% of all scheduled monuments within the south-east region) and more than 340 Bronze Age barrows which have legal protection overseen by English Heritage.

4.2. Transport Provision

4.2.1. Funding and Management of Visitor Transport

National Parks receive funding via the Department for Food and Rural Affairs (Defra). Funding has been reduced in recent years with the NFNPA reporting an 8% reduction in Defra funding for 2014-2015 compared to the previous year (NFNPA undated (annual report)) and a further 1.6% reduction for 2015-2016 (NFNPA undated). Just 4% of the NFNPA's net expenditure for 2015-2016 was used for 'Recreation Management and Transport' (NFNPA 2016). Additional funding for transport related projects was however secured by the Authority from the Department for Transport and Sustrans in 2014 including from the Local Sustainable Transport Fund (LSTF) as part of

the 'Sustainable transport for England's two newest National Parks' bid and the 'Linking Communities Fund'.

Ultimately the local highways authorities are responsible for the maintenance and development of transport infrastructure within National Parks. In the New Forest, most of the Park lies within Hampshire although areas to the west fall into Dorset and to the north into Wiltshire. Local Authorities set out transport priorities within Local Transport Plans (LTP). The Hampshire LTP provides the strategy for the period 2011-2031. The Hampshire LTP does not include any specific policies to address visitor transport in the New Forest but instead refers to the NFNPA's Management Plan and Recreation Management Strategy and LSTF and Linking Communities projects (Hampshire County Council 2013). 'The Partnership Plan for the New Forest National Park' was published jointly in 2015 by the statutory bodies identified above. The document represents an updated Park Management Plan and sets out actions for the period 2015-2020 (NFNPA 2015). The Partnership Plan includes eleven transport-related actions for the period alongside three actions relating to recreation. Further reference is made to these policies in context to specific transport areas.

4.2.2. Roads

The Park is traversed by the M27 and the A31 which form part of the strategic highway network and are therefore managed by Highways England. Up to the Cadnam interchange (east side of park) the M27 is formed of three lanes, to the west of the interchange capacity is reduced to two lanes as it becomes the A31 providing the main route to Bournemouth and Poole. There are also several smaller exits and accesses to and from the A31. Access to the New Forest can also be taken from Burley services (just east of Ringwood) with a Forest parking area being just 400m to the south of the junction. Therefore, whilst brown tourism road signs direct visitor access via the Cadnam Interchange it is possible to access the area from other points along the A31. Policy TT3 of The Partnership Plan seeks to focus long-distance travel on the A31/M27 in order to reduce the use of routes through the Forest:

"TT3 Work with Highways England to help minimise delays and to improve the reliability of journey times on the A31 and M27, in order to reduce the use of other routes through the Forest by long distance traffic."

(NFNPA 2015, p36)

To the south of the A31 and M27 the New Forest is crossed by the A35 which links Southampton with Christchurch and Bournemouth and the A337 linking New Milton and Lymington with the A31/M27 via Brockenhurst and Lyndhurst. The A35 and the A337 both route through the village of Lyndhurst where a one-way traffic flow system is in place.

An Air Quality Management Area was declared in Lyndhurst in 2005 for exceedance of the annual mean objective for nitrogen dioxide (New Forest District Council 2017). The village of Lyndhurst presents a bottleneck through which traffic routing from the Cadnam Interchange, along the A337 and A35 must pass. Highway capacity through the village is restricted and the high volume of slow-moving vehicles combined with the canyon effect of buildings along the High Street impact on air quality (NFDC 2008).

There are no policies which seek to reduce or limit the use of minor roads by motorised traffic although Policy TT4 seeks to develop a network of 'Quiet Lanes':

"TT4 Develop a 'Quiet Lanes' network in appropriate locations, initially as a limited pilot project, to help maintain the rural character of minor roads and enable their safe use by pedestrians, cyclists and horse riders, as well as motorists."

(NFNPA 2015, p36)

Quiet Lanes were originally an initiative by the Countryside Agency supported by the Department for Transport identifying minor rural roads which are appropriate for shared use by walkers, cyclists, horse riders and motorised users, these roads require low traffic flows travelling at low speeds (DfT 2004). This has not been progressed by Hampshire County Council.

4.2.3. Car Parking

The Forestry Commission maintain 134 car parking areas around the Park, these are free to use and are largely situated close to the start of forest trails. The parking areas vary in size with larger areas provided at popular visiting sites such as Bolderwood or Wilverly Plain. Car parks operated by the district council incur charges for use, these include car parks within Beaulieu, Burley, Brockenhurst and Lyndhurst village centres and at Keyhaven and Lepe Country Park.

There are no policies identifying the need to reduce parking availability or to charge for parking outside of village centres. The widespread availability of free parking provides for little incentive to travel by non-car modes with car parking charges and restrictions identified as providing an effective tool for achieving modal shift, furthermore, the enforcement of car parking charges redresses the inequity of maintaining facilities for car users (Steiner and Bristow 2000).

4.2.4. Rail Services

The South Western Mainline railway which runs between London Waterloo and Weymouth passes through the Park. All mainline services call at Brockenhurst station. Services from London Waterloo via Southampton to Bournemouth and Weymouth stop at Brockenhurst on average three times an hour in each direction. Branch line services to Lymington Town and Lymington Pier are also boarded at Brockenhurst with two services per hour in each direction. Further stations are present at Ashurst, Beaulieu Road and Sway. Trains call at Ashurst and Sway on an hourly basis and at Beaulieu Road on a roughly two hourly-basis.

Crosscountry services operating between Manchester and Bournemouth also call at Brockenhurst each hour in both directions. Compared to other National Parks in the UK, the New Forest has superior rail access based up the availability and frequency of mainline services. Furthermore, these services provide for access from Bournemouth and Southampton which represent a significant proportion of the day visitor catchment.

4.2.5. Bus Services

Four bus services currently operate within the Park. The 112 service routes between Lymington, Beaulieu and Hythe with four services each way on Tuesdays and Thursdays and three services each way on Saturdays. The Bluestar 8 routes from Southampton to Calshot with services calling at Calshot on a roughly hourly basis Monday to Saturdays (on Sundays the service terminates in Hythe). The Bluestar 6 service routes between Southampton and Lymington passing through Totton, Ashurst, Lyndhurst and Brockenhurst on an hourly basis Mondays to Saturdays with a reduced service on Sundays and bank holidays. In 2015 the Bluestar 6 was re-branded as the 'Forest Bus' using funds secured from the LSTF. The re-branding provided for distinctive bus graphics featuring the New Forest landscape and ponies and the service was enhanced to operate on an hourly frequency during the summer season effectively increasing the service's headway on Sundays. In 2016 the summer service reverted to its previous Sunday frequency providing five services a day (first bus from Southampton at 1110). The 'Forest Bus Baby' was also launched during summer of 2015 using LSTF to provide a cross-Forest bus route between Moors Valley (a popular country park visitor attraction west of Ringwood) and Hythe calling at Ringwood, Burley, Brockenhurst and Beaulieu. The service provided for an hourly frequency on Saturdays, Sundays and Bank Holidays between 24 May to 31 October. The bus included bus graphics like the Forest Bus and ran during 2015 only. The Beach Bus (99) was created in 2015 using the LSTF. During the six-week school summer break the service links Lymington and Hythe via Buckler's Hard, Beaulieu and Lepe, with six services in each direction operating daily during this period. During the first year of operation travel from Southampton included free travel on the Hythe Ferry and a free ice cream at Lepe Country Park. In 2017 it provided for a 50% reduction in ferry prices from Southampton, free ice cream at Lepe and 20% reduction on entry fees to Bucklers Hard, Beaulieu Motor Museum and Exbury Gardens. The service was not resumed in summer 2018 in the absence of any new funding source.

Whilst the re-branding of bus services was developed by the NFNPA using LSTF, Policy TT9 of the Partnership Plan formalises the ongoing intention for the promotion of bus services:

"TT9 Rebrand and promote existing local bus routes into and across the National Park, adding a New Forest theme, providing user-friendly information and enabling commercially viable services for residents. To include routes between Lymington and Southampton, Bournemouth and Salisbury and Southampton and Salisbury."

(NFNPA 2015, p37)

4.2.6. The New Forest Tour

The New Forest Tour (NFT) has operated since 2004 however the 2014 LSTF enabled that Tour to be extended in terms of both its routing and period of operation. The extension of the Tour aimed to support the bid's objective to make it easy to reach key attractions. The Tour represents a key component of the Authority's sustainable transport strategy and is identified within the Partnership Plan to provide "...residents and visitors to the area with a car-free way of enjoying the special qualities of the National Park". Policy TT8 sets out its continuing role in providing sustainable transport options:

"TT8 Improve opportunities to use a range of sustainable transport options, including the New Forest Tour, Beach Bus and other seasonal bus services, rail links, walking and cycling, and investigate the possibility of Park and Ride. The target is to achieve a 5% reduction in the number of visits by car by 2020."

(NFNPA 2015, p37)

The NFT is identified as a relative success given that it operated without subsidy in 2015 and is reported by the NFNPA to have saved over one million vehicle miles (NFNPA 2015). Success of the Tour is attributed to its positioning as an 'attraction in its own right' (Hiblin et al 2016). The Tour operates as three one-way circular routes incorporating most attractions within the Park, the routes intercept at Lyndhurst, Burley, Brockenhurst and Lymington and tickets allow for all day travel enabling visitors to hop on and off the bus. Passengers receive an information book which includes details of walking routes and discounts for entry at attractions. The Tour does not accept concessionary passes and although single tickets are available, they are not detailed within

any of the timetabling, ticketing or marketing information. As such it does not operate as a public bus service, despite this the Tour is included within the Hampshire public transport guide for the New Forest area (Hampshire County Council 2017).

4.3. Cycling in the New Forest

4.3.1. Cycle Routes

The New Forest is a popular destination for cycling. There are over 100 miles of way-marked cycle tracks across the Crown Lands and the area is relatively flat with the highest elevation across the Park being just 140m. These cycle tracks mostly follow existing forest service roads and are defined by numbered posts which identify where cycling is permitted (the extent of forest tracks is much greater however cycling is not permitted on all routes). Corresponding numbers are shown on maps produced by the Forestry Commission. Sustrans 'National Cycle Route 2' links Christchurch and Hythe, utilising sections of these waymarked tracks and the route of an old railway line in addition to the road network. To reach the cycle tracks from villages and some holiday parks it is necessary to first cycle on-road. The length of these on-road sections vary, with Brockenhurst providing the shortest and quietest road access to Forest tracks. Onroad sections are also required when cycling between settlements and attractions although there is an off-road cycle path along the side of the A35 between Ashurst and Lyndhurst. Cycling between Brockenhurst and Lyndhurst, Brockenhurst and Beaulieu and Brockenhurst and Burley all require on-road sections. Outside of villages the speed limit is restricted to 40mph, the NFNPA identify this speed restriction as a measure which enhances the safety of cyclists: "Over 100 miles of quiet forest trails and the 40mph speed limit on most roads makes it a safer place to cycle" (NFNPA 2017).

4.3.2. Cycle Hire

Cycle hire centres are present in the villages of Burley, Lyndhurst and Brockenhurst with further cycle hire available at Sandy Balls Holiday Park (a camping and caravan site in the north of the park), the Avon Tyrell Activity Centre and New Forest Activities in Beaulieu. Cycle hire providers will also deliver bikes directly to

accommodation. Cycle hire facilities in Brockenhurst are located adjacent to the railway station within the 'Family Cycling Centre' which opened in September 2016. The creation of the Family Cycling Centre was supported by Department of Transport funding through the Linking Communities Fund, being allocated 8.4% the funding received by the NFNPA. The application for funding sought to provide an "inspirational sustainable transport hub, focusing on providing a full range of cycling experiences to visitors and residents" (Hampshire County Council 2013(a), p4). **Table 1** provides a summary of features of the centre as identified within the funding application alongside details of actual provision.

Table 1 Summary of Family Cycle Centre features (NFNPA 2013, p4)

Features in funding application	Actual provision		
Over 400 bikes for hire	Not known		
Large cycle retail facility	Retail facility selling cycles and cycle		
	equipment		
Hosting of inclusive cycling	In place		
Workshop facilities	In place		
Visitor information centre, café and	No café but small seating area and limited		
interpretation centre	number of refreshments available		
Cycle training area	Not evident		
Bike wash for visitors bringing their own	sitors bringing their own Not evident		
bikes into the area			
Showers and locker facilities for visiting	One shower although not clear where this is		
cyclists	located and reportedly has never been used		
	and no locker facilities (Cycle Experience		
	2017)		
Maintenance facilities for proposed satellite	No longer applicable		
docking stations			
Luggage transfer services	Not available (Cycle Experience 2017)		
Electric vehicle hire centre	Not available		
New Forest travel ambassador base	Ambassador based elsewhere		
Pedal bus depot	No longer applicable		

The Linking Communities Fund application also included a scheme to provide a short-term cycle hire scheme with a network of mobile self-service docking stations. The scheme was abandoned in 2014 following concerns of the scheme's financial viability and anti-cycling sentiment (NFNPA 2014). The scheme would have used 56% of the funding received (circa £2,000,000), funding which was subsequently returned to the Department for Transport.

The application identified the following barriers that provision of short-term cycle hire would be able to help address:

- 1. No bike available at holiday base car journey required to bike hire centre
- Existing bike hire provision business models allow only full or half day cycling experiences unsuited towards visitors looking to make short journeys to attractions
- 3. Trains unable to carry more than three bikes, therefore visitors unlikely to bring own bikes to destination by this mode.

At the time of writing several cycle hire providers deliver bikes to accommodation or holiday bases. This includes Trax who advertise the availability of this service at Camping in the Forest sites and Cycle Experience who operate from the Family Cycling Centre. As such this service has the potential to significantly reduce the first barrier identified above. Cycle hire provision continues to be based around full or half day hire, although during peak summer periods this can be limited further to full-day hire in respect of the greater demand. Cycle Experience only detail full-day prices on the website.

4.3.3. Cycles on Trains

The limited space for cycles on trains is stated to be a further barrier to cycling in the New Forest. The funding application states that trains are only able to carry three cycles. This is the case for Crosscountry trains routing between Manchester and Bournemouth. Space for cycles on these trains is limited to 3 hanging spaces two of which can be pre-booked, with no further space where a bike can be stored without risking removal.

Southwest trains carry three bikes in each carriage designated for this purpose. The number of carriages with a cycle storage space varies although has been observed to be up to four, providing space for the carriage of 12 cycles. These spaces do not require that bikes are suspended instead bikes are wheeled onto the carriage. These services call at Brockenhurst three times an hour presenting more capacity for the carriage of bikes than is alluded to within the funding application. Furthermore, Brockenhurst represents

the latter part of this South West route with the busiest sections being observed to be between Southampton and London Waterloo. Cycles can also be carried on the branch line service between Brockenhurst, Lymington Town and Lymington Pier with two dedicated bike spaces on this service.

4.3.4. Cycles on the New Forest Tour Buses

The New Forest Tour allows the carriage of up to four bikes and the routes of the Tour are detailed on the New Forest Cycle Trail map produced by the Forestry Commission (NFNPA 2017). Carriage of bikes is within the disabled seating/pushchair area of the bus.

4.3.5. Visitor Attractions in the New Forest

The Park includes several large visitor attractions which, whilst situated within a wider rural tourism landscape, also represent stand-alone destinations. The National Motor Museum at Beaulieu attracted 330,000 visitors in 2017 (Visit Britain 2017) with a standard adult entry cost of £24.75 (Beaulieu 2019). A 20% discount is offered to visitors arriving on the NFT. Without the additional use of the NFT or a cycle the museum is not accessible by rail or scheduled bus. The Museum is open all year and hosts large events throughout the year such as 'Autojumble', however it is accessible by the NFT which operates during the summer only. Exbury Gardens and Buckler's Hard (there were 68,000 visitors to Buckler's Hard in 2017 (Visit Britain 2017)) and The New Forest Wildlife Park are also limited to summer NFT access only, also offering a 20% discount in entry for NFT users.

Lepe Country Park is also situated within the National Park boundary and receives around 300,000 visitors per year (Hampshire County Council 2016). As detailed above, the Beach Bus called at Lepe until 2017, therefore providing the justification for its name as this is the only area of beach front within the Park and therefore along the route of the service. There are currently no bus services routing to this park. The country park is managed by the New Forest District Council and parking charges apply. Permission was granted by the NFNPA for the development of a new visitor centre in 2016, this opened

in July 2018. The new building is elevated above the beach, a design which has been developed in response to the future threat of flooding as sea levels rise due to climate change. The new centre was supported by the reconfiguration and expansion of car parking providing an additional 108 spaces. No enhancements to cycle routes were provided and there were no requirements to provide public transport services (Hampshire County Council 2016).

Whilst visitation occurs across the National Park with many smaller, less well-known sites frequented by visitors from the immediately surrounding areas (Tourism South East 2005), there are several 'honey-pot' sites which draw higher numbers of visitors. These include the villages of Lyndhurst, Brockenhurst and Burley and the Bolderwood area which includes scenic routes (Ornamental Drive, Rhinefield Drive, Bolderwood Picnic and BBQ area and deer viewing platform). Whilst Lyndhurst and Brockenhurst are accessible by public transport, Burley is served in the summer by the NFT only and Bolderwood is both remote from public transport services and the route of the NFT.

4.4. Who Visits the New Forest National Park?

Research undertaken by Tourism South East in 2004/2005 represents the most detailed review of visitors to the New Forest to date. The research was commissioned by the Countryside Agency in order that the newly formed New Forest National Park Authority would have 'access to accurate information on visitor numbers, visitor profiles and visitor characteristics' (Tourism South East, 2005). The review included 3,838 face to face interviews, carried out across 70 survey sites within the area that was initially proposed as the new National Park boundary. The survey included 'all types of leisure visits' identifying them as follows:

- Leisure visits from home/workplace by New Forest residents;
- Leisure visits from home/workplace by people living outside the National Park boundary, including visits to friends and relatives;

- Holiday visits (1+nights away from home) by those staying overnight inside the National Park (including VFR);
- Holiday visits (1+ nights away from home) by those staying overnight outside the
 National Park boundary (incl. VFR) referred to as day visitors on holiday;
- Holiday visits by non-UK tourists

(Tourism South East 2005 p22)

Table 2 provides a summary of resulting visitor types as identified by the 2004 TSE visitor survey for the twelve-month survey period.

 Table 2
 Summary of visitor types (TSE 2005)

	Frequency	%
Local day visitors from home	1330	34.7
Other day visitors from home	969	25.2
Staying visitors (staying in NFNP)	803	20.9
Staying visitors (staying elsewhere)	736	19.2
Total	3838	100.0

'Local day visitors from home' are defined by TSE as those who live within the Park or within approximately five miles of the boundary (TSE 2005). The TSE study provided no distinction between a leisure visit and a tourism visit. The Great British Day Visitor Survey defines leisure and tourism visits based upon their regularity, duration and location. A tourism day visit being that which is undertaken outside of the 'usual environment' and lasting three or more hours. This definition is used within STEAM to estimate visitor days that are attributable to an area. Table 3 provides a summary of 'visitor days' spent in the New Forest as estimated by STEAM in 2013.

 Table 3
 Visitor days to the New Forest National Park 2013

	Annual number of visitors	Assumed number of visitor days per staying visitor	Annual number of visitor days
Day visitors	3,236,000	1	3,236,000
Serviced accommodation	232,000	2	450,200
Non-serviced accommodation	330,300	7	2,169,700
Staying with Friend or Relatives (SFR)	55,500	2	132300
Total	3,853,800		5,988,200

4.4.1. Local Leisure Visitors

The 2004 survey included routine leisure visits. These visits were largely for the purposes of exercise or dog-walking to Forest sites made by the local population and were factored into the estimated annual visitation for the Park resulting in an estimate of 13,555,400 'total visitor days' (Tourism South East, 2005) which was used within the 2014 LSTF application (NFNPA 2014) and continues to be used at the time of writing including by National Parks UK (National Parks UK 2017). This estimate included two million 'visitor days' generated by residents living within the New Forest National Park boundary and a further 3.8 million from adjacent areas and as such represents an overestimate of visitor days.

This application of the term 'visitor days' is inconsistent with wider definitions of both 'tourism day visits' and 'leisure day visits' which refer to the duration of stay with tourism day visits requiring visits to be outside of the 'usual environment'. The UNWTO defines the 'usual environment' as the geographical area "within which an individual conducts his/her regular life routines" (UNWTO undated), therefore it is the regularity or routine nature of these visits that identifies them as non-tourism visits. Furthermore, the shorter duration of these visits do not equate to 'visitor days' but rather trips. Trips made by the immediately local population were included within the survey (with attention paid to more peripheral and less well-known New Forest sites) in recognition of their utilisation of the Forest for leisure purposes.

This research focuses on non-routine visitation as discussed in Chapter 2 with respect to what constitutes rural tourism. However, it is important to appreciate the scale

and nature of more routine use of the New Forest by those living within and around the Park boundary when appraising the relative sustainability of transport use. The 2004 visitor survey dataset has been made available by the New Forest National Park Authority to inform this research and in order to provide further differentiation between key visitor types and to provide insight with respect to routine users of the New Forest. Additional analysis of the data has been summarised within chapter 6.

4.4.2. Staying Visitors

The TSE survey found 40% (Table 2) of all visitors interviewed at the survey sites were 'staying visitors', comprising of 21% of visitors who had accommodation within the New Forest and 19% with accommodation elsewhere. During the summer peak period, staying visitors accounted for a greater proportion of the visitor sample (50%). 56% of visitors staying in the New Forest were camping (tents, caravans and campervans) compared to 18% of visitors staying elsewhere. During the peak summer period the average length of stay was six nights reducing to 3 nights during the off-peak winter period (TSE 2005).

Conclusions

The New Forest has been designated as a National Park both in respect to its special qualities which include areas of significant ecological value and its role in supporting recreation. Legislation requires that the public's enjoyment of the Park does not conflict with its ongoing conservation and enhancement. The Forestry Commission also has a dual role alongside other Government bodies which further seek to protect its ecology, culture and archaeology. However, overall governance of transport lies primarily with the Highways Authority, in particular Hampshire County Council who have the greatest coverage of the Park. The LTP policies of the Authority give minimal attention to the additional transport demands of visitation. Recent enhancements to transport provision which were specifically directed at visitor travel have been achieved using grants from Central Government and Sustrans with initiatives such as the Beach Bus proving to be unviable once the funding stream ends. Whilst the Park is comparatively well served by rail, the supporting bus network is limited and attractions and popular sites within the

Park are inaccessible by public transport. The New Forest Tour includes some of these routes during the summer but does not operate as a typical bus service. Cycle hire is available but remains limited to half and full day hire. Conversely, the Park has a network of free car parks and the recent redevelopment of visitor facilities at Lepe Country Park has been accompanied with increased parking provision in the absence of any requirements to improve access by other modes.

5. METHODOLOGY

Introduction

5.1. Critical Realism and Social Practice Theory

Robson (2002) describes how a realist philosophy accepts that social research takes place in an open system with multiple variables which may not be available for manipulation. Nevertheless, realist researchers still endeavour to understand the mechanisms and contexts which bring about a particular outcome. Robson (2002, p39) sets out how understanding the mechanisms at work alongside the contexts in which they operate can be applied to "...optimise the effects of innovation by appropriate contextual change or by finding alternate ways of countering blocking mechanisms." This description of the realist's desire to understand mechanisms and contexts presents significant parallels with the application of Social Practice Theory as described in chapter 3. The examples in Chapter 3 show how Social Practice Theory has been used to reframe sustainability problems with the objective of identifying workable solutions. Such research therefore aims to create 'problem-centred knowledge' with an overriding interest in solving practical problems (Tribe and Liburd 2016).

The parallels between Social Practice Theory and wider realist research philosophy is further apparent within the key features of critical realism as outlined by Sayer (2000). For critical realists the 'real' is represented not only by objects but also their structures and powers and it fundamentally recognises that "powers may exist unexercised" (Sayer 2000, p12). The key features described by Sayer (2000) include 'Stratification and Emergence'. The stratified ontology of critical realism allows for powers that may potentially be activated or conversely remain dormant in the same way as a practice may have a memory with the potential for resurrection in a new modified form (Strengers and Maller 2015). Critical Realism argues that new phenomena can 'emerge' from the conjunction of two or more features and that what is created is not readily defined by the constituent parts, but is dependent on potentially unseen or unobservable internal relations and/or dependencies just as Shove (2012) identifies the connections between elements of practice within the 3 Elements Model. Research undertaken from a critical realist perspective does not necessarily seek regularity to

explain causation, but rather aims to identify the operation of causal mechanisms and the conditions within which they are activated (Sayer 2000). The adoption of a critical realist perspective is therefore manifested by the social practices' theoretical framework of this research.

5.2. Research Methods

The objective of this research is to examine how transport provision within rural tourism can meet sustainability objectives whilst fulfilling the legislative purposes of these protected areas. Transport can have adverse effects which are contrary to the first purpose of National Parks and AONBs; 'to conserve and enhance' whilst also being necessary in order to 'promote opportunities for the understanding and enjoyment' in terms of providing access and as a means to experience these areas. Key research questions stem from this objective, firstly, what form should transport take in rural tourism? The literature review has provided numerous examples of transport initiatives that have been implemented both in the UK and internationally. These schemes are considered largely in isolation, yet wider tourism discourse identifies the complexities associated with visitor transport use, for instance in terms of travel patterns; visitor travel is frequently non-linear; tourism is typically a group activity with varying needs and expectations between individual members of the group (Lue at al 1993); and visitors derive intrinsic benefits from their transport use in this context (Guiver and Stanford 2014, Lumsdon and McGrath 2016). As such there is a requirement to understand transport in terms of both its availability across a rural tourism area alongside how it is used and by whom. Further key questions generated by the research objective relate to how this provision meets sustainability objectives, therefore what should sustainable transport look like in this context and how does current provision fit with these criteria? This reasserts the need to understand the form of provision and crucially how it is used. Here Social Practice Theory provides the framework for examining provision and its use holistically and the following objectives are subsequently derived:

- 1) To identify existing rural tourism travel practices
- 2) To analyse how practices may vary according to visitor characteristics

These objectives generate more specific research questions guided by the 3 Elements Model (Shove et al 2012). To identify rural tourism travel practices, it is necessary to identify the materials, competences and meanings alongside interrelations with wider practices with no single method providing the scope to achieve this. This research therefore adopts a mixed methods approach comprising of participant observation, semi-structured interviews and a quantitative survey.

Within this research, 'materials' is interpreted as representing existing transport provision alongside the structures that govern its use (for example pricing). Secondary sources can readily provide information with respect to what is available and the extent of use but cannot identify how competences and meanings intercept with materiality. Participant observation is therefore employed to provide an understanding of the existing transport provision and its relative usability. Semi-structured interviews are used to draw out the 'meanings' that visitors attribute to their use of transport whilst providing the opportunity to elaborate on travel patterns and varying competences that may exist within a group. A quantitative visitor survey allows for the identification of trends and variation in transport use with respect to visitor characteristics and provides for an understanding of the extent to which practices vary amongst different user groups. The methods are used concurrently to address different aspects of the research problem with findings being merged to provide an overall interpretation, an approach which is consistent with a multilevel triangulation design as described by Tashakkori and Teddlie (2003).

5.3. Observation and Participant Observation

5.3.1. Introduction

Giddens asserts that "all social research has a necessarily cultural, ethnographic or 'anthropological' aspect to it" (Giddens 1984, p284) and he identifies a need for familiarity when describing human activities. Participant observation provides for a method to achieve such familiarisation. For Dewalt and Dewalt (2002) participant observation provides a means of taking social understanding beyond that which is explicit with the goal of understanding phenomena rather than the scale of their occurrence. However participant observation can provide for a 'strategic method' to be used

according to the questions being asked (Bernard 2006). For this research, participant observation is used to achieve familiarity with the material and structural elements of transport provision in the New Forest National Park. The adoption of this method aimed to take this understanding beyond that which has be gained from desktop research, providing the researcher with first-hand experience of the relative usability of transport provision in this context. Whilst it is adopted predominantly to understand the material elements of visitor transport practices the method is also used to provide insight into competences and meanings in relation to this materiality.

Participant observation is a defining method of cultural anthropology requiring the researcher to immerse themselves in a culture and then to critically reflect on what has been observed. In this way fieldworkers become the instruments of data collection and data analysis (Bernard 2006). The approach therefore values the researcher's own reflections but at the same time calls for reflexivity and honesty with respect to the researcher's positioning and subsequent interpretation of the results (Matthews 2012). Dewalt and Dewalt (2011, p37) consider "...reflexivity as a beginning point rather than as an end to ethnography. We need to be aware of whom we are, understand our biases as much as we can, and understand and interpret our interactions with the people we study."

5.3.2. Researcher's Positioning

This therefore represents an appropriate juncture to outline the researcher's positioning. In this context the researcher is already an 'insider' having performed rural tourism visiting practices in the UK across her lifetime albeit not within the New Forest. As a child, the researcher was a regular day visitor to the Peak District National Park taking part mostly in group hiking activities. The Peak District National Park represented the nearest landscape area for recreational activities to the researcher's childhood home near Nottingham and familiarity with this Park developed during childhood and early teens with numerous day and residential visits organised by school followed by independent backpacking trips during late teens. As a child other more distant National Parks were typically visited as part of other holidays in the UK, for example a visit to Exmoor whilst holidaying in Minehead. As an adult, the researcher's enjoyment of

outdoor activities has increased and consequently, she has sought to spend longer periods within rural destinations as opposed to visits being largely incidental to a main coastalbased holiday. Most recently the researcher has taken family holidays in Snowdonia and adult breaks in the Brecon Beacons, the Lake District and the Yorkshire Dales. The researcher recognises that her current life stage and personal circumstances influence the rural tourism activities that she can enjoy. Having older children allows for more physically demanding activities such as mountain biking and kayaking and the researcher's own interest in keeping fit generates a desire for active holidays. In contrast the researcher recalls visits to the Peak District as a child with her elderly grandparents which typically focused on driving through the countryside enjoying the views. The researcher's background in transport planning needs to be acknowledged with respect to the approach to critically appraising transport schemes. The researcher may therefore take a less naturalistic approach to reviewing transport provision. Finally, the researcher's experience as a cycling instructor and a ride leader may generate additional or different interpretations of cycle use in the New Forest.

5.3.3. Locations and Activities

Locations and activities during which participant observation was undertaken were initially selected in order to allow the researcher to familiarise herself with the New Forest area. As the project progressed, locations were selected to represent different types of visitation. Overnight visits to the Park took a range of forms with both long and short stay visits at campsites, caravan parks and hotels. Trips were linked with visits to the wider area, visits were made in passing and day visits were made from nearby Southampton. The types of trips reflected the visitation patterns outlined within the 2004 New Forest Visitor Survey (TSE 2005) and the researcher's own experience of pass-by and linked trips alongside the visitation patterns identified by Lue at al (1997). Tourism surveys (GBDVS and GBTS) highlight that tourism visits are mostly undertaken as part of a group as such where possible the researcher sought to share experiences in the New Forest with family and friends. **Table 4** provides a summary of times and locations.

 Table 4
 Summary of observational research

Base	Date of Visit	Length of Stay	Group Composition	Main activities
Hoburne Bashley Holiday Park	August 2014	7 days	Alone 3 days Adult and one youth (aged 16) - 2 days Two adults - 2 days	New Forest Tour. Cycling- forest tracks. Visitor attractions (Reptile Centre & Lymington museum) Key villages (Brockenhurst and Burley), Cycling trip to the Isle of Wight,
Sandy Balls Holiday Park,	May 2015	7 nights	Two adults and two children (aged 10 and 12)	Cycling -forest tracks. Cycling on road, Cycle hire
Shorefields Holiday Park,	August 2015	7 nights	One adult and two children (both aged 12) Three adults and one youth (aged 17)	New Forest Tour. Cycle hire. Walking. Visits to Bournemouth
Holmsley Campsite	August 2015	4 nights	Alone	Cycling- forest tracks.
Burley (Youth Hostel)	August 2015	1 night	Alone	Local bus services
Bournemouth short stay (Hotel in Bournemouth)	Feb 2016	1 night	One adult and one child (aged 13)	Cycle hire (half day)
Southampton (AirBnB)	April 2016	2 nights	Two adults	Urban cycle routes. Rail services
Roundhills Campsite	May 2016	3 nights	One adult and one child (aged 13)	Kayaking and archery at activity centre Cycling (own bike)
Burley (Youth Hostel)	August 2016	6 nights	Alone	Cycling to interview destinations Day visit to Milford on Sea.
Burley (Youth Hostel)	Oct 2016	2 nights	Alone	Cycle – forest tracks New Forest Tour
Brockenhurst	July 2017	Day visit	Alone	Visiting by train, cycle hire from Brockenhurst, use of gravel bike

5.3.4. Recording and Analysis

Records of observations were made as soon as convenient and at a time when writing notes did not detract from the visiting experience. The objective of the participant observation was to become familiar with the available transport modes in the area and for this first-hand experience to provide an understanding of relative usability. As such

resulting field notes largely reported on how transport was used during the visit with descriptions and reflections made at that time and during the preparation of the notes. In this way the notes represent an initial analysis as the researcher begins to make inferences during their creation (Dewalt and Dewalt 2002). Photographs, leaflets and timetables were used to provide for further detailed information on transport provision. Notes of visits, photographs and leaflets were collated and used alongside the interview data to identify how transport featured within visiting practices.

5.3.5. Limitations

Whilst the researcher was undertaking similar activities to the general visiting population it is acknowledged that the initial motivation for the visit was different, as such caution was taken when interpreting the meanings that the researcher identified for example, the impacts of traffic. It was noted that the researcher was less able to brush aside unpleasant experiences and subsequently reflected on these more critically compared to visits made under more typical circumstances. Here the additional perspectives offered by interview enabled the identification of bias.

As the researcher was not local to the NFNP, she faced practical disadvantages when seeking to understand the experiences of more frequent day visitors, as such observations are taken from the perspective of a staying visitor developing increasing familiarity with subsequent visits. Here the visitor interviews provided insight into the visiting practices of more locally based day visitors thereby overcoming this limitation.

5.4. Visitor Survey

5.4.1. Introduction

Research which adopts a practice perspective is typically qualitative as in-depth understandings of the elements of practices and their emergence are sought. However, the integration of quantitative data can help to identify the diversity or extent of practices across a population. For example, Pullinger et al (2013) integrated qualitative and quantitative data to investigate the diversity and variation of water use across a population

and Mattioli et al (2016) use UK time use data to identify car intensive practices. Whilst qualitative methods provide for a detailed theoretical understanding of practices, quantitative data needs to be employed in order to understand the extent to which a practice is reproduced. Within the context of problem-based research such as that which seeks to address a sustainability issue, a quantifiable understanding of the problem is essential to identify the extent to which an intervention is required for the effective use of often limited resources. Within this study it is was a requirement to understand the current form that transport use has in this context and it is a research objective to understand how transport use within existing visiting practices varies according to visitor characteristics. Therefore, to understand the extent of existing sustainability challenges and to explore the diversity of visitor characteristics, a larger sample of visitor transport use was required. This scalable understanding is provided using a face to face visitor survey undertaken in collaboration with the NFNPA.

Since 2004, six in-situ face-to-face surveys of visitors to the New Forest National Park have been commissioned. Five of the surveys were undertaken by Tourism South East, including that forming part of the initial largest and most extensive study during 2004. The 2004 TSE study was commissioned by the Countryside Agency prior to issue of the confirmation order designating the New Forest as a National Park with consideration that the newly formed New Forest National Park Authority would require "accurate information on visitor numbers, visitor profiles and visit characteristics" in order to fulfil its statutory purposes (Tourism South East (TSE) 2005, p.2). This study also included onsite observations at 62 locations within the New Forest, manually recording visitor movements including direction of travel, number of dogs, whether dogs were on a lead and the presence of children within the group (TSE 2005).

The research objectives of the 2004 study have been reproduced below:

- To identify the profile of visitors to the proposed New Forest National Park in terms of visitor type (i.e. local residents, leisure day visitors and staying visitors), age, gender, disability and socio-economic characteristics;
- To explore the characteristics of visits to the proposed New Forest National Park in terms of transport used, activities undertaken, and facilities used;

- To identify the main reasons why people visit the New Forest, exploring whether
 the visit meets their expectations and their perceptions of particular aspects of
 their visit.
- To gather primary data identifying where people go, what routes and access points are used, and what activities are undertaken at specific locations.
- To produce reliable estimates of visitor volumes and their resultant economic impact based on accurate local information on the characteristics of visits, visitor expenditure and other key information.

(TSE 2005)

The NFNPA provided access to the 2004 data and some secondary analysis was undertaken in order to develop a more detailed understanding of the key characteristics of day visitors. This additional analysis utilised cross-tabulation within SPSS to compare the car mode share, group composition (including the presence of dogs) and main activities at the site with visit frequency. This resulting analysis and discussion are provided within Chapter 6.

The research objectives of the subsequent TSE visitor surveys of 2009, 2010 and 2011 continue to include the first three objectives identified above whilst adding the additional objectives of monitoring visitor expenditure and awareness of responsible tourism messages. The surveys of 2013 and 2014 have a narrower focus with the monitoring of the transport choices and attitudes of visitors representing the main objective of the surveys. Both surveys were undertaken with funding from the Department for Transport's Local Sustainable Transport Fund. The 2013 survey undertaken by Research EU, identifies that "the aim of the visitor surveys is to monitor year-on-year changes in the ratio of car to public transport visits, as well as the desirability of travelling sustainably, and the effectiveness of campaign messages" (Research Team EU 2013, p5). The 2014 survey "was designed to provide the evidential baseline to assess recent initiatives to encourage greener forms of travel to and around the New Forest" (TSE 2014, p.3).

The NFNPA's research objectives for the 2015 visitor survey remained focused on the transport behaviour of visitors to the New Forest with the aim of providing for ongoing monitoring of modal shares in respect of the various sustainable transport initiatives being implemented across the Park. The Authority sought to improve the approach to surveying to ensure that the special characteristics of the New Forest are provided for within the questioning format. In partnership with the NFNPA the researcher identified the following objectives for the 2015 visitor survey:

- To provide a continuing understanding of visitor characteristics, origins and reasons for visiting the New Forest;
- To provide an on-going understanding of travel patterns and modal shares by visitor type;
- To develop a robust format for ongoing monitoring that is consistent and compatible with other sources of data and information.

The timing of the survey presented an opportunity to use the data collected to support the research project with some overlap of the project's objectives with those identified above. By providing for an understanding of travel patterns and modal shares, the survey would inform the research project on the form that transport use in this context took and the identification of visitor characteristics alongside this use would allow for the exploration of how transport practices might vary amongst different visitor types. To inform the study, the researcher reviewed the approach and resulting data of the earlier surveys and subsequently identified areas where the format could be improved to provide more reliable results. As such the NFNPA allowed the researcher to develop a modified survey both to provide a more robust and consistent format and to support the objectives of the research project.

5.4.2. Survey Design

The previous visitor surveys recognised that visitors used more than one mode of transport during the course of their visit to the New Forest. For staying visitors there was also an initial mode to reach the area at the beginning of their stay. However, the approach to questioning provided for a vague understanding of where and when modal change had taken place and the extent to which these modes represented more of an activity than a

means to reach a specific destination. **Table 5** reproduces question 9a of the 2004 TSE visitor survey.

Table 5Question 9a 2004 Visitor Survey

How did you travel here (to this site) today?			
(circle one MAIN mode in the fir	rst column, other mo	des mentioned in the	
second column)			
	Main	Other	
Car/Van	-01	-01	
Motorcycle/Moped	-02	-02	
Taxi	-03	-03	
Bus/Coach service	-04	-04	
Coach (private tour)	-05	-05	
Bicycle	-06	-06	
Train	-07	-07	
Walked	-08	-08	
On horse-back	-09	-09	
Other (please specify below)	-10	-10	

Whilst question 9a allows for the identification of more than one mode there is no context linked to use. As detailed above, the 2013 and 2014 had a greater focus on transport with the objective of monitoring visitor modal shares. However, these surveys continued with the approach set out within the 2004 survey requesting details of 'main' and 'other modes used'. The resulting data provides for ambiguous mode share results. For instance, within the 2014 survey, 87% of visitors reported that private cars were the 'main mode of transport used to get to this area' reducing to 20% for the 'main mode to get around this area today' with 68% of visitors 'getting around' on foot. Here 'getting around' on foot could mean taking a walk as a leisure activity (e.g. around a forest track).

The 2015 survey design sought to provide for a more accurate understanding of transport use across the visitor day; where and how different modes were used and by whom. It also sought to clearly differentiate between transport use for access and movement around the area and where use of transport was primarily an activity. To achieve this, mode use was collected across three stages with visitor activities identified for each stage. This revised approach drew from the National Travel Survey format which collects details of travel in journey stages across the day. The questioning was limited to three stages with respect to the greater time constraints of face-to-face surveys. Also, unlike the National Travel Survey which is typically completed at the end of the day,

visitors would need to provide details of their next journey stage that would take place after leaving the survey site. A further question sought details of the visitor's final destination for that day therefore identifying where a visit had been made linked with other purposes or had been made in passing. The survey also asked visitors about the number of cars they had used to reach the New Forest, with larger groups congregating in the Park potentially arriving in more than one vehicle. This enabled an assessment of car occupancy rates amongst visitors.

In order to understand the composition of the group, visitors were asked how many members of their group fell into age categories alongside a general question regarding who they were visiting with. The age categories were selected to enable consistency with the 2004 TSE study providing for comparison. Visitors were also asked whether their group included any dogs.

5.4.3. Survey Timing and Locations

Resource limitations required that only a small number of locations could be selected for use as visitor survey sites. In addition, different locations in the Park presented widely different transport attributes with some benefiting from access by bus and train and others being more remote. Selecting too many sites would provide for small sample sizes at individual locations presenting statistical limitations on site-specific analysis. As such sites were selected with consideration to the individual attributes of the site and use of the site within the previous visitor surveys. **Table 6** provides a summary of the sites previously utilised within all of the six visitor surveys.

 Table 6
 Overview of face-to-face surveys (2004-2014)

Interview Locations	Number of times used
	as a survey site
Sandy Balls Holiday Park	1
Lymington Town Centre	5
Lyndhurst Town Centre	6
Brockenhurst village centre	3
Burley village centre	6
Ringwood Town centre	1
Bolderwood	4
Hatchet Pond	2
Keyhaven	5
Ashurst	1
Bucklers Hard	1

The use of survey sites which had featured in previous surveys provided for comparison with previous datasets. The three village/town centre sites of Lymington, Lyndhurst and Burley feature most frequently as survey locations. As Lymington lies outside of the National Park boundary this site it was excluded for the purposes of this study. Further detailed consideration of the attributes of individual sites was undertaken with the aim of ensuring that the final selected sites reflect a range of New Forest situations particularly in terms of transport provision. This considers the site's proximity to rail transport, the New Forest Tour, scheduled buses and advertised walking and cycling routes.

Lyndhurst and Burley both offer range of transport attributes. Lyndhurst is an interchange for two of the New Forest Tour routes and benefits from an hourly bus service which operates between Southampton and Lymington. This service was subject to rebranding and significant marketing in 2015. The town also offers rainy day activities with the New Forest Centre and shops. Burley is also on the New Forest Tour and is a hub for cycle hire with popular cycle routes from the village. The village also benefited from the provision of a weekend scheduled bus service over the 2015 summer period. Brockenhurst and Ashurst both benefit from rail access however Ashurst has only featured in one previous survey. Brockenhurst is an interchange for the New Forest Tour and is on the route of the existing scheduled bus service detailed above. Brockenhurst is also an important cycle hire hub within the New Forest.

Keyhaven and Bolderwood both feature in the previous surveys. Keyhaven is on the New Forest Tour but has no other public transport links. The site is distinctive from most New Forest sites being located on the coast and at the very edge of the New Forest National Park boundary near Lymington. Bolderwood is remote from public transport links but represents a high use site with facilities for visitors including car parking, toilets, and seasonal ranger information service. Seasonal barbeques are also permitted here, and it is at the convergence of popular walking and cycling routes. At the request of the NFNPA with the aim of providing for wider geographic coverage of the National Park, Fritham and Lepe Country Park were also selected as survey sites. Fritham is a small village to the north of the A34, it has no public transport links but has access to a forest walking and cycling route alongside a popular public house. Lepe Country Park provides for the only beach access within the Park's boundary and at the time of the survey was served by the Beach Bus.

The NFNPA required that the survey was undertaken during the peak summer months coinciding with the seasonal operation of the New Forest Tour (late June to mid-September) and other services. This period overlapped with four of the six previous visitor surveys. A sample size of a similar scale or bigger to those previously achieved was targeted with a range of dates including weekdays and weekends to be included throughout the period. The 2004 TSE study undertook survey sessions between the hours of 1100 and 1600 with a set number of weekdays and weekends (TSE 2005); the 2009, 2010 and 2011 surveyed for five hours between 1100-1700. The majority of responses to the 2014 survey were collected between 1000-1400. To provide for consistency, the 1100-1700 time period was adopted for 2015. This time period would allow visitors to report on mode-use and activities that had already taken place alongside those which were intended after leaving the survey site.

5.4.4. Pilot Survey

A pilot of the survey was undertaken during the May half term break (week commencing 25th May 2015) with the aim of testing the proposed approach to questioning prior to its use over the summer period. The pilot survey was undertaken at four of the five survey sites identified for the visitor survey and was therefore also able

to provide some feedback with regards to advantages and disadvantages of the selected locations. **Table 7** provides a summary of the times and locations of the pilot survey alongside the number of respondents.

Table 7Summary of pilot survey

Date/Time	Location	Number of respondents
25/05/15 (Bank Holiday	Bolderwood	10
Monday) /1500-1700	Near to the deer observation platform	
26/05/15 (Tuesday)/1500-1700	Burley Village Centre	10
	Benches adjacent to the Burley Inn and	
	benches within The Mall and adjacent to	
	seating near public toilets	
27/05/15 (Wednesday)/1500-	Brockenhurst Village Centre (Brookley	10
1600	Road). Area of benches opposite Tesco	
	Express and adjacent to the ford (both sides	
	of the road)	
28/05/15 (Thursday)/1500-1700	Keyhaven, benches adjacent to harbour wall	10
	along the northern side of the harbour and at	
	the gate to the Solent Way	

The locations used within the four survey locations were selected with consideration as to the availability and frequency of passers-by, with the additional requirement for the site to be 'transport neutral', therefore not in a car park, not adjacent to a bus stop or rail station etc. The actual sites chosen tended to be close to benches or areas where visitors lingered e.g. near the deer observation platform at Bolderwood. It was considered useful to move the survey between two points so that visitors did not become too aware that a survey was being conducted and therefore avoid the area (or purposely take part) this assisted in providing for more potential respondents and increased randomness.

In summary, the selected sites provided for a steady flow of visitors allowing for the targeted ten surveys to be collected relatively quickly. Brockenhurst and Burley represented the busiest locations whilst visitors to Keyhaven were more dispersed. The survey took no more than five minutes (and was even shorter for visitors from home) however many respondents were keen to chat for longer. The pilot survey was conducted using paper copies however it was the intention that the final survey would be conducted digitally to allow the use of question logic. The detailed appraisal of the pilot survey is

attached as **Appendix A**. A refined approach to questioning was subsequently developed as a flow-chart and is attached as **Appendix B**.

5.4.5. Final Survey

The final survey format as used by ResearchEU (external consultants employed by NFNPA to undertake the survey) is attached as **Appendix C**. **Table 8** provides a summary of the survey dates, response rates and locations. The researcher used the survey as a 'gateway' to longer conversations (semi-structured interviews discussed below) with visitors over the survey period and these additional survey responses have been included within the overall sample. The NFNPA collected 21 survey responses at Wilverley Plain. These were not collected as part of the agreed survey strategy but are included within the overall results with further analysis taking place on a site by site basis. A total sample of 664 was achieved. The results were provided by ResearchEU to the researcher for analysis in an Excel format. Excel and SPSS were used to undertake detailed analysis.

5.4.6. Data Analysis

Initial descriptive statistical analysis of the dataset was undertaken in 2015 for NFNPA and is attached as **Appendix D**. Further analysis was undertaken using both Excel and SPSS with regards to the research objectives. Analytical techniques comprised of cross-tabulation and chi square tests for statistical significance.

5.4.7. Limitations

The survey yielded a large overall sample for the Park however this ultimately comprised of smaller samples collected at what were revealed to be disparate locations in terms of accessibility and typical visiting activities which they supported. As such there was a need for these smaller samples to stand alone for some aspects of analysis. Samples collected at Wilverley Plain and Fritham were not large enough to provide for disaggregated statistical analysis.

Despite refinements to the survey following the pilot, the final format still provided for some areas of uncertainty, for example the apparent confusion between the Forest Bus and the NFT. Given the small number of respondents using bus services during their visit it was possible to decipher where these services had been confused. There continued to be a blurring of understanding of the difference between visiting a particular survey site and the wider area.

 Table 8
 Summary of survey sample and days collected

Survey Site	No of Survey Days	Survey Days	Number of Responses	% of Total
Bolderwood	4	15 th July 2015	84	12.7
		1st August 2015		
		3 rd August 2015		
		5 th September 2015		
Brockenhurst	7	15 th July 2015	105	15.8
		20 th July 2015		
		6 th August 2015		
		14 th August 2015		
		15 th August 2015		
		28th August 2015		
		13 th September 2015		
Burley	7	12th July 2015	118	17.8
·		15 th July 2015		
		2 nd August 2015		
		3 rd August 2015		
		13 th August 2015		
		14 th August 2015		
		30 th August 2015		
Fritham	3	29th July 2015	35	5.3
		19th August 2015		
		3 rd September 2015		
Keyhaven	5	12th July 2015	90	13.6
•		9 th August 2015		
		19 th August 2015		
		2 nd September 2015		
		13 th September 2015		
Lepe	4	29th July 2015	81	12.2
•		1 st August 2015		
		8 th August 2015		
		22 nd August 2015		
Lyndhurst	6	10 th July 2015	130	19.6
•		2 nd August 2015		
		15 th August 2015		
		22 nd August 2015		
		29th August 2015		
		13 th September 2015		
Wilverley Plain	1	29th August 2015	21	3.2
Total days	37	Total responses	664	100%

5.5. Semi-Structured Interviews

5.5.1. Introduction

The piloting phase of the visitor survey provided an opportunity to meet and speak with visitors at an early stage in the project. During the pilot, visitors voluntarily elaborated on their use of transport during their visit beyond the scope of the closed questions and were happy to continue discussing their experiences once the survey had been completed. The visitor survey therefore provided a gateway for more in-depth discussion and predetermined open-ended questions were prepared in order to undertake short semi-structured interviews with visitors in-situ during their visit. The questioning allowed for a flexible approach which was particularly valuable when interviewing more than one person; rural tourism is typically an activity undertaken with others, as such both the visitor survey and subsequent interviews frequently included contributions from more than one respondent. Within a group interview an overly prescriptive approach can reduce or eliminate interaction with the wider group (Robson 2002).

King 1994 (in Robson 2002 p271) identifies circumstances within which a qualitative research interview is particularly appropriate. These include "where a study focuses on the meaning of particular phenomena to the participants" and "where a quantitative study has been carried out, and qualitative data are required to validate particular measures or to clarify and illustrate the meanings of the findings". Within this study, semi-structured interviews are employed as a method to explore the meanings and competences within visitor transport practices but also provide for a more detailed understanding of the way materials or infrastructure are used. The interviews allow for an expansion of the understanding of transport use provided by the visitor survey.

5.5.2. Development of Interview Questions

Interview questions were developed and trialled in 2015 to coincide with the visitor survey. The researcher first requested that visitors participated in the survey and following completion asked if they would be able to continue with some open questions that would be recorded. Surveys and interviews were therefore undertaken within the

locations and timeframes identified above. In this way the researcher was able to contribute the survey responses to the wider sample. The interviews sometimes took place on a nearby bench often at the participant's request with the digital recorder placed on the researcher's clipboard. Questions were identified with respect to the objective of identifying the elements of visitor transport practices. **Table 9** provides a summary of the open-ended questions used in 2015.

 Table 9
 Summary of open-ended questions used in 2015

Question	Objective
1) What motivated you to visit the New Forest?	Why they have chosen to visit at that
	point in time exploring meaning
2) When did you make the decision to visit the New Forest?	Know-how, degree of planning,
Please tell me more about how you/your family made this	influences/meaning
decision.	
3) Why did you choose to come to the New Forest in particular?	meaning
4) Is there a particular aspect/hobby/activity that brings you to	Motivation/meanings
the New Forest?	
5) What sort of vehicle/bike do you have?	Materials
6) What other sorts of activities/journeys do you use your	Use of materials, transferability -
vehicle/bike for?	connections with other practices
7) How do you travel for other purposes? (If on bikes – do they	Connections with other practices
use them as home?) (If arrived by bus/train – do they have a	
car? Do they travel by train and bus usually?)	
8) What route did you take to get here?	Know-how, local knowledge,
	competency
9) Do you always take this route? If so why?	Know-how, local knowledge,
	competency
10) How well do you know the area?	Know-how, competency
11) Do you have favourite places that you always/nearly	Meaning, trajectory of practices
always visit? What is it about this place that you like?	
12) (for those who are unfamiliar with the area)	Meaning, Competences, trajectory of
How did you find out about good places to visit? Are there	practices
other places closer to home that they like to visit more	
frequently – can tell me about these?	
13) Tell me about any equipment/toys/games etc you have	Materials
brought with you for your visit?	
14) Did you visit the New Forest/other National Parks when	Trajectory of practices
you were younger/a child? What did you do there? How did	
you travel?	
15) Do you think it would have been possible to visit the New	Know-how
Forest without your car? Explain why?	

41 survey responses were collected by the researcher with a further ten visitor groups agreeing to take part in a longer interview (including one visitor group interviewed at the Youth Hostel). The interviews were transcribed using NVIVO and initial analysis was undertaken in the form of interview summaries, and a critical review of the relative

value of the questions used and range of participants. Full details of this analysis are attached as **Appendix D**.

5.5.3. 2016 Interviews

Further semi-structured interviews were undertaken in July and August 2016 to provide for a greater range of visitor experiences. The visitor survey continued to be used as a gateway and as a means of establishing the key characteristics of the visiting groups being interviewed although the survey responses were not analysed further. The questioning approach was modified following the review of the 2015 interviews to provide more simplified question headings with additional prompts. Details of the changes are included within **Appendix D**.

Interviews were undertaken in Bolderwood, Brockenhurst, Lyndhurst and Linford Bottom. Linford Bottom is located on the western edge of the Forest approximately 4km from Ringwood. It comprises of a car parking area, access to Forest trails and a grassy area adjacent to a stream. As such it is a popular location for family picnics, but is less well known and therefore largely frequented by those with existing knowledge of the area. The site was included within the 2004 TSE survey with respondents at this location being predominantly drawn from the immediate area. Five interviews were undertaken at Linford Bottom over the course of one afternoon. The visiting groups stayed for a few hours but were not replenished by new visitors and as such the small pool of visitors was soon exhausted. In contrast Bolderwood, Brockenhurst and Lyndhurst provided for a steady flow of visitors from all main visitor groups (local day visitors, staying visitors, families and couples). A further 34 interviews were undertaken at these locations. Interviewing continued until saturation was achieved amongst a diverse range of visitor types (day and staying visitors, families and couples). **Table 10** provides a summary.

 Table 10
 Summary of Interview Locations

Year	Interview Location	Staying Visitors	Day Visitors
	Lyndhurst	5	
2015	Brockenhurst	2	1
	Burley	1	
	YHA	1	
	Total	10	0
	Linford Bottom		5
2016	Bolderwood	6	11
	Lyndhurst	9	6
	Brockenhurst	2	
	Total	39	9

5.5.4. Data Analysis

The 2016 interviews were transcribed and analysed using NVIVO software. The resulting interview transcripts were used to identify areas where transport use interacted with visiting practices including journeys to and around the area alongside additional journey legs and functions. These findings are presented alongside those from the researcher's observations with respect to how transport was used and where this contributed to elements of practice.

5.6. Ethical Considerations

An ethical review was undertaken by the Ethics Committee at Bournemouth University. The process of the review identified the need to provide respondents with written information on the purposes of the survey alongside contact details for further enquiry. The review also required that respondents should be able to withdraw their results up to an identified date and that reporting protected individual identities with care taken in mapping of any postcode data. Personal data collected during the initial survey and subsequent interview related to home origins only. Participants sometimes referred to names of group members therefore all reporting of the data was undertaken to ensure that the participants are anonymised and that it is not possible to identify individuals from the content. With respect to observation work it was not possible to inform participants of their involvement in the study as this may have resulted in a conscious change in their

behaviour and in most cases, it was not practical given that actions were observed remotely. However, no personal information relating to the participants was recorded other than a brief description including estimated age and gender. Photography was used to record the situation within which the observation is made. Images which include participants were not without permission from the participants.

5.7. Health and Safety

The researcher ensured that a member of the supervisory team and a member of the New Forest National Park Authority was aware of the location and time span of survey and interview work. The researcher also had a friend on stand-by when undertaking surveys and interviews. The researcher checked in and out at the beginning and end of the survey and interview period with this individual. Surveys and interviews were undertaken in overlooked and busy locations with the provision of natural surveillance. The researcher approached visitors with sensitivity and did not pursue reluctant participants. Remote and secluded locations were avoided. When undertaking observation work alone the researcher informed a close friend of the location and had a fully charged mobile phone available.

5.8. Presentation of Findings

Whilst the findings of both the quantitative and qualitative research methods interact and overlap, they have been presented separately within the following two chapters with respect to managing this significant volume of data. Some elements of the findings have been previously reported and published within the Journal of Sustainable Tourism. This article can be found in **Appendix E**.

6. VISITOR SURVEY

Introduction

A separate report detailing key descriptive statistics derived from the visitor survey was prepared for the NFNPA and is attached as **Appendix F**. This initial summary of the data was undertaken in 2015 before identifying areas for further analysis. This chapter uses the survey data to identify how transport modes are integrated within visiting practices and how this varies according to visitor characteristics. In understanding the approach adopted it is useful to refer to the proposition of "holding the practice constant and seeking to understand who does it and why" (Shove and Pantzar 2007, p155).

This chapter includes details and discussion of secondary data analysis of the 2004 TSE survey. This analysis provides for a greater understanding of the existing profile of day visitors to the Park identifying that frequent local leisure visits represent a significant transport demand. However, it is the less routine tourism visits made by those travelling to the area for the day (day visitors), staying visitors with accommodation in Park and staying visitors with the accommodation elsewhere which provide for the overarching focus of this research and therefore the starting point when considering variation in transport use within visiting practices. The 2015 visitor survey is used to explore transport use with respect to the following:

- Staying visitor travel to reach accommodation at the beginning and end of a stay
- Staying visitor travel to survey sites from accommodation bases located both within the New Forest and within the surrounding areas
- Travel from home origins to New Forest visitor sites by day visitors

6.1. Local Leisure Visitors

This additional analysis uses the responses to question 7b of the 2004 questionnaire (How many times have you visited this location in the last 12 months?) to identify those visits which represent part of a "regular life routine" and are therefore undertaken within the 'usual environment' and are not tourism visits (UNWTO 2016 p21). For the purposes of this analysis, respondents stating that they visit a particular site in the New Forest on a weekly or more frequent basis throughout the year are considered to be undertaking an

activity which forms part of their regular life routine. As such respondents stating 48 or more visits (accounting for holiday periods away) per year represent the threshold for what can be considered as 'regular'. 786 respondents (20% of the total sample) stated that they visited the survey site 48 or more times a year. These responses were collected across 65 survey sites many of which are on the periphery of the Park. (5% of the total sample visited the same site 330 or more times a year). **Table 11** provides a summary of key attributes of daily and weekly visitors to New Forest survey sites as identified from the data.

Table 11 Summary of key attributes for visitors using survey sites on a weekly or more frequent basis

Mode Share:	car/van	walked	cycled	other			
Weekly visitors	87%	11%	1%	1%			
Daily visitors	75%	23%	0%	1%			
Duration of	Up to 1	1 to 2	2 to 3	More			
visit to survey	hour	hours	hours	than 3			
site:				hours			
Weekly visitors	64%	27%	4%	4%			
Daily visitors	72%	23%	2%	2%			
Main purpose	walk	walking	routine	jogging/	other		
of visit:		the dog	shopping	running/			
			/other	cycling/			
			shopping	horse			
				riding			
Weekly visitors	21%	66%	3%	3%	8%		
Daily visitors	19%	71%	2%	1%	6%		
Group	One	Two	Three	Group			
Composition:	adult	adults	adults or	with			
	only		more	children			
Weekly visitors	60%	30%	2%	8%			
Daily visitors	68%	25%	1%	6%			
Age Structure:	0-15	16-24	25-34	35-44	45-54	55-64	65+
Weekly visitors	9%	1%	8%	14%	18%	22%	29%
Daily visitors	8%	2%	6%	15%	18%	24%	28%
Gender:	Male	Female					
Weekly visitors	45%	55%					
Daily visitors	47%	53%					
G 141		İ					
Groups with							
Groups with dogs:							
_	80%						

Visits were mostly short in duration with 72% and 64% of daily and weekly visits less than one hour respectively. Visits were focused around walking a dog with 87% and 80% of daily and weekly visitors having a dog with them. 75% of respondents stating that they visited 330 times a year or more had used their cars to reach the site. Further analysis of postcode origins of respondents with dogs visiting New Forest sites every day by car provided an average distance from home to the site of 6km therefore equating to a 12km round trip each day (or for some, twice daily) or around 4000 vehicle kms per year. Dog walking has a typically "low mobility intensity" meaning that it is unlikely to be flanked by other transport activities (Mattioli et al 2016, p61) as such most of these trips were unlikely to be linked with other journey purposes. Dog walkers are known to seek locations where they can let their dogs spend time off-lead with wilder areas such as forests and moorlands considered to be ideal places for exercising dogs (Brown 2014). Dog walkers are recognised as a major visitor group within the Cairngorms National Park necessitating specific access management measures (Jenkinson 2011). Such measures seek to recognise the positive aspects of dog ownership, but also seek balance in resource use in the context of pressures from the local dog-owning community, for example the New Forest Dog Owners Group actively campaigns for the right to walk dogs freely in the Forest (New Forest Dog Owners Group 2019). 38% of New Forest District households include a dog compared with 22% nationally (England Marketing 2005).

Question 7a asks 'How many times have you visited the New Forest in the last 12 months (prior to this trip)?' presenting an open understanding of what may represent a 'visit'. **Table 12** provides further analysis of the frequencies of day visits as identified by question 7a alongside percentage car use for travelling to survey site and group characteristics. 77% of the day visitor sample visited once a month or more frequently, just 3% had not visited in the preceding twelve-month period suggesting that virtually all day visitors were familiar with the area. Cars provided the principal means of access for both frequent and less frequent day visitors, although visitors reporting to visit a specific site daily (**Table 11**) had a lower car modal share reflecting their closer proximity which both allowed for the greater frequency of visits and increased the potential for access on foot. This analysis illustrates how visits to the New Forest which are made from home with the visitor returning the same day exist on a continuum, with daily (or even twice

daily) routine leisure-related visits being largely undertaken by the local population visiting alone for short durations primarily for the purpose of dog-walking at one extreme and less frequent visits made with others for longer durations at the other. Frequent and more routine leisure visits are outside the scope of this research however it is evident that the transport impact resulting from these more frequent visits is significant and may be greater in scale than that which is attributable to rural tourism visits.

 Table 12
 Summary of day visitor frequency as identified from TSE 2004 data

How many times have you visited the New Forest in the last 12 months (prior to this trip)?	Frequency	%	% by car to survey site	% of visits to the survey site one hour or less	% of groups with dogs	% visiting alone	% visiting with childre n
Visit at least once daily(year-round)	648	28	88	67	81	57	9
Visit at least twice a week	339	15	94	52	67	46	12
Visit at least once a week	275	12	92	34	48	25	20
Visit at least once a fortnight	224	10	91	32	32	18	22
Visit at least once a month	292	13	94	28	23	17	25
Less than 12 visits in last 12 months	106	5	93	25	18	7	29
Less than 6 visits in last 12 months	229	10	92	27	19	12	29
Only visited once or twice in last 12 months	120	5	86	33	23	10	28
Not visited in last 12 months	63	3	86	24	13	6	29
	2296	100%					

6.2. 2015 Visitor Survey - Visit Frequency

Staying and day visitors were roughly evenly represented within the survey data. **Table 13** provides a summary of visitor types. The sample included 9 respondents identifying as 'other'. Eight of these respondents were from overseas and were staying in Bournemouth and Poole for extended periods of time ("for the summer"/three months/six months) whilst attending language schools. For the purposes of analysis, this

group are treated as staying visitors. The remaining 'other' respondent was accompanying a group of children on a day trip from a local school and is therefore is a day visitor.

 Table 13
 Summary of Visitor Types

	Number	% 1
Day visit from home	325	49
Holiday	301	45
Staying with friends or relatives	29	4
Other	9	1
Total Day Visitors	326	49
Total Staying Visitors	338	51
	664	100%

¹ Doesn't total due to rounding

Table 14 summarises the visit frequencies of staying and day visitors. Increasing frequencies of visits is associated with decreasing distances from visitor origins, an effect of distance decay (Lew and McKercher 2006). Day visitors within the sample were largely drawn from the surrounding areas, 87% of day visitors within the sample had origins within Hampshire and Dorset (see **Table 27**) and those with greatest proximity reported to visit most frequently. 27% of staying visitors stated that they had never visited the NFNP before, 11% of these were visiting from overseas. Therefore, overall, 91% of all domestic visitors in the sample had visited the New Forest before. The observation and interview data identify how visitor familiarity has contributed to the trajectory of visiting practices whilst providing for greater competencies in avoiding congestion representing one way in which prior knowledge is used to enhance visiting experiences. The theory of case-based planning suggests that visitors can draw upon an existing store of knowledge and understanding of rules for the purposes of holiday planning (Stewart and Vogt 1999). Existing experience of a destination area resulting from more frequent visitation contributes to familiarity and affects the type of information used in planning with more familiar visitors having greater reliance on memory (Gursoy et al 2018). Familiar visitors will be aware of transport opportunities and constraints (such as the availability of free parking areas across the New Forest Park) and indeed memories of visiting the Park may be formed around how transport has been used within previous visits contributing elements of meaning to the visiting practice. In this way visitors who

visit the Forest multiple times a year (93% of day visitors within the sample) are likely to have an established approach to visiting. The day visitor sample includes respondents who stated that they visited the New Forest 'everyday', 'twice a week' or 'once a week'. 28% of all day visitor home origins were within the Park and around its edge (**Table 27**) therefore suggesting some overlap with more routine leisure visits but also emphasising the significance of this group of visitors. A review of visitors stating that they visited 'everyday' or 'twice a week' found that 16% were visiting alone compared with 46% of day visitors stating that they visited the Park this frequently in the 2004 survey (**Table 12**). The range of activities, presence of friends and family members and a lower presence of dogs indicates that these visits are less routine than those associated with repeated year-round visits to the same site or solely for the purpose of dog-walking. These responses have been retained within the dataset, however analysis of transport use considers the visitor's origin.

Table 14 *Visit frequency (2015 Visitor Survey)*

Visit frequency	Day Visitors (n.326)	Staying visitors (n.338) %
every day	14	0
twice a week	7	0
once a week	10	0
once a fortnight	13	0
once a month	20	2
a few times a year	28	27
not visited in the last 12 months	5	44
not visited before	2	27

6.3. Staying Visitor Travel to Accommodation

Visit England (2014) identify several key differences between staying visitors who travel to their accommodation by car and those who travel by public transport (their analysis combines bus, coach and train use). The proportion of travel by public transport is greater to urban destinations and to serviced accommodation and a higher proportion of short-stay holidays are reached by public transport compared to longer trips (24% of one to three-night holidays compared to 10% of stays of four nights or longer) alongside a higher proportion of trips to stay with friends and relatives.

The differences highlighted by Visit England (2014) suggest that the mode of transport used to reach accommodation may provide for different holiday practices, for instance, public transport more readily supports adult-only, short-stay urban breaks. The mode used to reach the destination can affect how visitors subsequently travel during their stay with those arriving by car continuing to have this resource at their disposal with the potential to geographically extend their movements during the holiday beyond the confines of the public transport network and the more limited distance range offered by travel on foot or by cycle.

Within the visitor survey, staying visitors comprised of those stating that they were on holiday and those stating that they were staying with friends or relatives alongside a small number of students from overseas attending language schools. **Table 15** provides a summary.

 Table 15
 Summary of staying visitors

	n	%
Staying visitors on holiday	297	88
Visitors staying with friends	33	10
and relatives		
Other staying visitors	8	2

The visitor survey asked staying visitors where their accommodation was located. Visitors typically answered with the name of the campsite, holiday park, village or town. From this it was possible to identify whether their accommodation was located within the Park boundary. Accommodation around the periphery of the Park was observed to have a strong association with the New Forest. For example, Shorefield Country Park is located near Milford on Sea and is outside of the Park boundary but describes itself as being "...situated on the southern edge of the New Forest" (Shorefield 2017). Within previous surveys it was evident that visitors did not distinguish between areas around the edge of the Park and those locations that were within the boundary, but instead regarded the whole area as the 'New Forest', possibly referring to the area which represented the main focus of their holiday. Therefore, there is some overspill in terms of the marketing of the distinctiveness of the area beyond the Park's administrative boundary.

The location of staying visitor accommodation has been grouped into four categories based on where their accommodation is located:

- 1. Within the boundary of the New Forest National Park;
- 2. Within the towns, villages and holiday parks around the periphery of the Park;
- 3. Within the nearby large towns and cities of Bournemouth, Southampton and Salisbury;
- 4. Within other locations.

Table 16 provides a summary of visitor accommodation locations identified within the survey sample. 78% of visitors surveyed had accommodation either within the Park or within the towns and villages on its periphery.

Visitors from beyond the New Forest area were largely drawn from Bournemouth (n. 49). This is reflective of the proximity of this seaside destination to the Park but bears similarities to other UK National Parks which receive an overlap in visitation from large seaside towns, for example a significant proportion of visitation to the South Downs National Park comprises staying visitors with accommodation in Eastbourne and Brighton (South Downs National Park Authority 2016). For these visitors the New Forest is less likely to be the main focus of their holiday, but rather a 'secondary destination' (McKercher 2001).

Table 16 Summary of accommodation locations within 2015 visitor survey

		% of staying
Accommodation Location	Number	visitors
New Forest National Park	203	61
Near the New Forest Towns and villages near the Park boundary (Lymington, Milford on Sea, New Milton, Hythe, Dibden, Ringwood, Verwood, St Leonards)	57	17
Nearby Urban Areas (Bournemouth, Salisbury and Southampton)	62	19
Other locations (Wimborne, Poole, Portsmouth, Swanage, Basingstoke, Dorchester)	12	4
Missing answer for accommodation	4	
	338	100

Staying visitors were asked how they travelled to their accommodation at the beginning of their stay. This is considered separately to the transport used by visitors to reach survey sites. **Table 17** shows the modes used by staying visitors to reach their accommodation.

Table 17 Summary of mode of travel to accommodation by location

Location of Accommodation	Sample size	Private Vehicle %	Train	Bus/Minibus/ Coach %	Other
All locations	334	81%	4%	13%	2%
New Forest National Park	201	93%	3%	3%	1%
Near the New Forest	56	80%	5%	11%	4%
Nearby urban areas	61	44%	5%	48%	3%
Other locations	12	83%	8%	8%	0%

X²=61.730, df=2, p=<.001 (Combining 'Nearby urban' with 'Other' and Train with Bus/Minibus/Coach and Other modes)

The proportion of visitors travelling to their accommodation locations using private vehicles was significantly higher for those with accommodation located within the National Park (chi-square test, Table 17). This greater reliance on private vehicles reflects both the variation in accessibility by other modes across the wider geographical area of the Park and the limited availability of rail and bus services beyond the main villages. Additionally, accommodation provision within the Park is predominantly within campsites. The nature of camping requires the transportation of equipment and is typically car reliant or with respect to campervans and motorhomes transportation is integral to the accommodation (n. 79 of staying visitors in the sample were staying in campervans, motorhomes and touring caravans). Staying visitors also used their vehicles to transport their own cycles to the area, 16% (n. 53) a minimum of staying visitors had used their own bikes to reach the survey site or planned to use their own bikes during the course of the day, although this is likely to represent an underestimate as this was not a specific question within the survey and is derived from mode shares and stated activities for one day only.

Table 18 summarises mode shares by accommodation type for visitors who were camping and those who were staying in serviced accommodation (bed and breakfast/guest

house, hotel, pub/inn). Visitors staying in serviced accommodation had a significantly lower private vehicle mode share than those who were camping. 21% of visitors staying in catered accommodation had travelled by coach. Visitors staying in serviced accommodation are able to bring less luggage, in addition the visiting groups were smaller and comprised of fewer families. The sample of visitors staying in self-catering accommodation was too small to test for significance however travel was predominantly by car.

Table 18 *Summary of mode of travel by accommodation type (camping and catered)*

	Sample size	Private Vehicles	Train	Bus/Minibus/ Coach	On foot	Other
Hotel/Pub/Inn/B&B/Guest House	129	71%	7%	21%	0%	1%
Camping (Campervan/motorhome/ Touring Caravan/Tent	122	94%	2%	3%	1%	0%

6.3.1. Staying Visitors Stopping En-Route

For staying visitors, the journey to the accommodation is temporally separate from other transport use during the stay, however some visits to the New Forest were combined with the journey to and from the accommodation at the beginning or the end of the stay. The visitor survey sought to establish the extent to which trips to the New Forest survey sites were made on the way to or from accommodation. The New Forest provides for an interesting and convenient place to stop-off en-route to holiday destinations on the south coast of Dorset with the route by road passing through the Park. Stopping off en-route is a common feature of trips undertaken by independent travellers (McKercher 2001; Lue at al 1993). Question 23 of the survey asked visitors what their "final destination" would be and for those visitors planning further stops, the question was repeated towards the end of the survey. For some staying visitors, the New Forest was en-route to other holiday destinations such as Bournemouth. Staying visitors stopped at New Forest sites on their way to or from their accommodation both located within the New Forest and elsewhere. 10% (n.33) of staying visitor groups had stopped at the New Forest survey sites either on their way to or from their accommodation as part of their overall journey to or from home.

The majority of these visitors were staying in the Park (n. 22), therefore their visit was not so much a stop at a secondary destination but part of the overall trip chain for that day. Detailed examples of visitors stopping off en-route to home and accommodation were provided within the visitor interviews. It is possible that the choice of survey sites and timing of the survey may have resulted in an inaccurate reflection of the scale of visitors calling into the New Forest en-route to other destinations with sites located shorter distances from the A31 being potentially more attractive for stopping off.

6.3.2. Visitors Travelling to Accommodation by Bus, Coach and Rail

Chart 1 compares the age profile of staying visitors travelling to their accommodation in private vehicles with those travelling by minibus/coach and train. Children in younger age groups (5 and under and 6 to 10 years) are largely absent from visitor groups arriving by minibus, bus, coach and rail (just one visitor group travelling by these modes included children in these age groups). The higher proportions of older children, younger adults and adults aged 65 and over reflects the higher capacity of coaches bringing visiting groups to the area at one time.

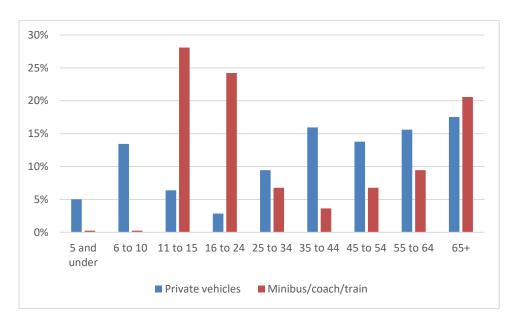


Chart 1 Comparative age profiles of visitors travelling to accommodation by private vehicles and minibus/coach/train (includes all group members)

Within the visitor survey sample, a lower private vehicle mode share for travel to accommodation in 'nearby urban areas' is attributable to the propensity for coach-based trips to Bournemouth. In 2016, 5% of overnight tourism journeys to destinations in Great Britain were made by bus and coach, comprising of 2% by regular bus and coach and 3% by organised coach tours (Kantar TNS 2017). 12% (n. 42) of staying visitors sampled travelled to their accommodation by bus, minibus or coach at the beginning of their stay, n. 27 were staying in hotels and n. 29 were staying in accommodation in Bournemouth. Half (n. 21) of these respondents were from overseas.

Some of the responses for visitors travelling to their accommodation by coach were collected from members of the same coach party. For example, separate survey responses from members of the same group included eight responses from students from overseas who were staying in halls of residence or with host families in Bournemouth and Poole. This group of respondents were all interviewed on the same day at the same location and were clearly part of the same coach party (all reporting to be visiting Stonehenge and Salisbury after the stop in the New Forest). Six separate survey responses were also collected from a group staying in a hotel in Bournemouth, all six responses reported that they were over 65 and would be visiting Beaulieu after their stop in Lyndhurst and all had Lowestoft postcodes. These responses have been retained individually within the sample as they continue to represent multiple visiting groups Becken (2005) notes how participants in European coach parties identify their immediate partner or friends as their group as opposed to the whole coach party). Furthermore, their significance within the sample at individual survey sites is reflective of their presence during stops at attractions. When a coach party arrives at a rural tourism site the visitor profile at that time will comprise of a high proportion of that party.

Additional analysis of staying visitors reporting to have travelled to accommodation by bus/minibus/coach identifies four groups within the data, these are summarised below:

- Groups of visitors from overseas, predominantly staying with host families and halls of residence in Bournemouth visiting the New Forest as part of an organised coach tour. Typically consisting of teenagers and young adults (11 groups)
- 2. Family groups staying in the New Forest (two groups).

- 3. Groups of older adults aged over 55 from the UK, staying in Bournemouth and Lymington, visiting New Forest sites by coach as part of their overall holiday (six groups)
- 4. Organised groups of children and young adults (all over the age of 11) camping in the New Forest, visiting New Forest sites by minibus, on foot or cycle (four groups).

Heterogeneity existed even within the small sample of bus and coach users yielded by the visitor survey. The first group may be atypical of Bournemouth which is home to a number of residential language schools providing tuition to students from overseas. In the UK, retired people represent the largest market segment for coach tours (Visit England 2014) and studies from overseas also identify that participants in coach tours are mostly child-free, with the majority travelling alone or as couples (Becken 2005). Scheduled express coach services are predominantly used for holiday and leisure travel with long distance journeys accounting for 68% of coach miles (Dargay and Clark 2012), users typically comprising of those with reduced access to private car transport (White and Robbins 2012). In Great Britain, the over 60s make up a greater proportion staying visitors on holiday travelling by coach (Dargay and Clark 2012).

Travelling to Accommodation by Train

In 2016, 10% of journeys to holiday destinations for overnight stays (14% for stays with friends and relatives) were undertaken by train (Visit Britain 2016), long-distance trips to denser urban destinations are more likely to be undertaken by train (Dargay and Clark 2012). A total of 14 visitor groups surveyed had travelled to their accommodation by train, representing 4% of all staying visitors in the sample (**Table 19**). All but one of the respondents were staying in accommodation located in villages and towns served by rail; Lyndhurst being the only location which is not directly accessible by rail (6km from Brockenhurst). The majority of the accommodation used was catered or was within homes of friends or relatives, just two of the respondents were camping. Seven of the respondents lived in London and three were visiting from overseas, the remainder had travelled from other UK origins comprising of longer distances from the New Forest (Scotland and Norfolk). The average length of stay for visitors travelling by rail to their

accommodation was four nights. Visitors from overseas reported the longest stays. There were no children within any of the groups.

Further review of postcode data shows that respondents travelling from London all originated from areas within Inner London where more than 50% of households are recorded to not have access to a private car or van, compared to 26% in England and Wales as whole (Census 2011).

 Table 19
 Summary of respondents travelling to accommodation by rail

Group	Curry Commonition	Accommodation	Accommodation	Length of Stay (number of nights)	Homo Origin
size	Group Composition	type	Location	nignts)	Home Origin Overseas
4	Adults only – Travelling with friends	hotel	Bournemouth	6	(Netherlands)
4	Adults only – Travelling with friends	hotel	Brockenhurst	2	Inner London
2	Adults only – Travelling with family	Friends or relatives house	New Milton	3	Perth (Scotland)
2	Adults only – Travelling with partner	camping (tent)	Lymington	3	Inner London
2	Adults only – Travelling with partner	B&B/guest house	Brockenhurst	4	Havant
1	Travelling Alone (over 65)	B&B/guest house	Brockenhurst	4	Overseas (Australia)
2	Adults only – Travelling with partner	hotel	Brockenhurst	2	Inner London
4	Adults only – Travelling with family	hotel	Southampton	2	Dundee (Scotland)
2	Adults only – Travelling with partner	camping (tent)	Brockenhurst	2	Inner London
2	Adults only – Travelling with partner	Friends or relatives house	Dorchester	2	Inner London
2	Adults only – Travelling with family	Friends or relatives house	New Milton	21	Overseas (USA)
2	Adults only – Travelling with friends	hotel	Lyndhurst	2	Inner London
2	Adults only – Travelling with partner (over 65)	hotel	Bournemouth	5	Cromer
3	Adults only – Travelling with friends	hotel	Brockenhurst	3	Inner London

6.3.3. Travel to Accommodation - Summary

Transport use to reach accommodation is intrinsic to wider holiday practices. Within the New Forest 79% of bed spaces during the peak season are within campsites

and the materiality of camping largely depends upon the use of private vehicles. The following section shows how for staying visitors, moving around the Park by cycle forms part of their visiting experience creating additional need for private vehicles for transporting cycles into the area. Outside of urban areas, travel by car to reach accommodation bases is the predominant practice across all age groups, conversely, travel by public transport provides for more niche groups (child-free, lower car access, short-stay, catered accommodation). These visits are less readily aligned with rural tourism in terms of public transport accessibility and the availability of catered accommodation on a large scale.

6.4. Visitor Travel to Survey Sites

Staying visitors travelled to the survey sites from their accommodation bases which as detailed above, were either located within the National Park, around its periphery or elsewhere, with Bournemouth representing a key origin outside of the Park. Day visitors had travelled from their home on the day of the survey. **Table 20** shows the overall modal shares to survey sites for all visitor types.

 Table 20
 Visitor mode shares to all survey sites

	All Visitors		Day V	isitors	Staying Visitors		
Mode of Travel (all survey site locations)	Number	%	Number	%	Number	%	
car or van	402	61	249	76	153	46	
train	8	1	5	2	3	1	
bus: New Forest Tour	23	3	5	2	18	5	
bus: Forest Bus	6	1	3	1	3	1	
bus: Forest Bus Baby	0	0	0	0	0	0	
bus: local bus service	2	0	0	0	2	1	
minibus	4	1	2	1	2	1	
coach	41	6	6	2	35	10	
Twizzy/electric vehicle	1	0	0	0	1	0	
campervan/ motorhome	14	2	3	1	11	3	
motorbike	3	0	2	1	1	0	
taxi	0	0	0	0	0	0	
bicycle: own	66	10	27	8	39	12	
bicycle: hired	19	3	4	1	15	4	
on foot	72	11	19	6	53	16	
other	1	0	1	0	0	0	
	662	100	326	100	336	100	
Private vehicles	420	63%	254	78%	166	49%	
Public transport (train, bus, New Forest Tour)	39	6%	13	4%	26	8%	
Active travel modes (walking and cycling)	157	24%	50	15%	107	32%	
Missing answers	2			-	2	<u> </u>	

Table 20 shows that within the survey sample, the private vehicle mode share for travel to the survey sites was significantly higher for day visitors than staying visitors, whilst the active transport mode share (walking and cycling) was significantly less. Public transport use represented just 6% across all visitor types with rail representing just 1% of the total. As detailed above, 61% of staying visitors had accommodation bases within the Park and were therefore able to make greater use of walking and cycling to move around the area unsupported by private vehicles.

The mode of transport used to reach the survey site did not always represent the only mode used as visitors employed other modes for a prior and subsequent journey stages. **Table 21** provides a summary of where respondents used other modes either before reaching the survey site or for onward travel. The analysis provides for an adjusted overall visitor private vehicle mode share to survey sites of 67%.

 Table 21
 Multi-modal travel to the survey sites

Visitor travel to survey sites	All Visitors	Also used car or van	Also used bus	Also used train	Adjusted Private Vehicle Mode Share
Bus: New Forest Tour	23	3	0	1	
Bicycle: own	66	8	0	0	
Bicycle: hired	19	7	1	0	
On foot	72	7	3	0	
Private Vehicles	420	+25			445 (67%)

Table 22 provides a summary of modal shares to individual survey sites including an adjustment where cars have been used to support other modes. As outlined in the preceding chapter, the NFNPA collected an additional 21 survey responses at Wilverley Plain and only 35 responses were collected at Fritham limiting the statistical value of these as stand-alone samples. Table 23 shows how village survey sites have significantly lower private vehicle modal shares than more remote locations such as Bolderwood and Lepe. This reflects the relative accessibility of the survey sites in terms of the availability of public transport services and proximity to visitor origins, in particular those of staying visitors.

Table 22Mode Shares to Survey Sites

Travel to survey site	Brockenhur st Village Centre (n.105)	Burley Village Centre (n. 110)	Lyndhurst Village Centre ¹ (n. 130)	Bolderwood (n. 84)	Keyhaven (n. 90) %	Lepe (n. 81) %	Fritham (n. 35)	Wilverley Plain (n. 21)
Car, van, motorbike, campervan/motorhome	49	56	47	76	76	100	31	95
Public Transport (train, bus, New Forest Tour)	10	13	10	0	2	0	0	0
Walking	24	6	12	2	9	0	40	0
Cycling	17	13	14	14	13	0	29	5
Minibus, coach, taxi, other	0	12	16	8	0	0	0	0
Adjusted private vehicle mode share	53		53	85	77			

¹ not 100% due to rounding

 X^2 =131.835, df=15, p=<.001 (excluding Fritham and Wilverley Plain)

 Table 23
 Comparison of Modal Shares of Village and Isolated Survey Sites

Travel to survey site	Brockenhurst Village Centre (n.105) %	Burley Village Centre (n. 110)	Lyndhurst Village Centre ¹ (n. 130)	Bolderwood (n. 84)	Keyhaven (n. 90) %	Lepe (n. 81) %	Fritham (n. 35) %	Wilverley Plain (n. 21)
Car, van, motorbike, campervan/motorhome	49	56	47	76	76	100	31	95
Public Transport (train, bus, New Forest Tour)	10	13	10	0	2	0	0	0
Walking	24	6	12	2	9	0	40	0
Cycling	17	13	14	14	13	0	29	5
Minibus, coach, taxi, other	0	12	16	8	0	0	0	0

¹ not 100% due to rounding

 X^2 =131.835, df=15, p=<.001 (excluding Fritham and Wilverley Plain)

6.4.1. Transport Mode and Visitor Origins

The disparity between survey sites is associated with the visitor profiles of the samples collected and their relative origins before travelling to the survey site. For example, the highest active travel mode was reported at Brockenhurst. 41% of journeys into Brockenhurst were on foot and by cycle reflecting the composition of the Brockenhurst sample, with 61% of visitors surveyed in this location staying within the Park. Half of all these staying visitors had accommodation in and around Brockenhurst and therefore benefited from shorter distances to the village's amenities (**Table 24**). In contrast Bolderwood had a larger proportion of day visitors and is more remote from any significant accommodation provision within the Park and cannot be accessed by public transport (**Table 25**).

 Table 24
 Overview of Brockenhurst Sample

Visitor Type	Brockenhurst sample	Private Vehicles	Walking and Cycling	Public Transport
Day Visitors	17	11	1	5
Holiday and Staying with Friends and Relatives	88	41	42	5
(Staying in the NFNP)	64	37	37	0
(Staying in and around Brockenhurst)	45	17	28	0
Total	105	52	43	10

 Table 25
 Overview of Bolderwood Sample

Visitor Type	Bolderwoo d sample	Private Vehicles	Walking and Cycling	Minibus/Coac h
			5	
			(3 supported by	
Day Visitors	47	39	car)	3
Holiday and Staying			10	
with Friends and			(5 supported by	
Relatives	37	25	car)	2
Total	84	64	15	5
		(72)*		

^{*}including those undertaking an initial journey leg by car

Mode of travel is shown to be determined by the relative accessibility of the survey site in terms of the visitor origins. Visitors staying within the Park had significantly higher walking and cycling mode shares for travel to survey site (**Table 26**) and day visitors travelling from origins within the Park and around its immediate periphery also had the greatest propensity to walk and cycle (**Table 27**). The previous section shows that 93% of staying visitors with accommodation in the Park had made their initial journey to the area in private vehicles and therefore continued to have this vehicle at their disposal. Despite the availability of these vehicles, a high proportion of trips to survey sites were undertaken on foot and by cycle.

 Table 26
 Staying visitor modal shares to survey sites by accommodation origin

Travel to survey site	Staying within the Park boundary %	Staying in towns and villages adjacent to the NFNP %	Staying in urban areas near the NFNPA %
Car, van, motorbike, campervan/motorhome	45	65	48
Public Transport (train, bus, New Forest Tour)	7	7	9
Walking	25	6	0
Cycling	22	13	5
Minibus, coach, taxi, other	1	9	38

X²=102.507, df=8, p=<.001

 Table 27
 Day visitor origins and mode shares

Day Visitor Origins	Number	% of total	% Private Vehicle
Southampton (city area)	30	10%	97%
Wider Southampton area	28	9%	93%
Edge of the New Forest	60	19%	75%
Within the New Forest National Park	28	9%	54%
Portsmouth area	30	10%	93%
Other Hampshire	21	7%	90%
Bournemouth and Christchurch	43	14%	86%
Other Dorset areas	33	11%	88%
Other counties	39	13%	87%
All origins	312	100%	84%
(no postcode provided)	(13)		
Total	325		

6.4.2. Visit Structure

Visitors stopped at more than one location over the course of the day. The survey recorded the location, mode of travel and activities at up to three points: before arriving at the survey site, to the survey site and any planned next stop. The final destination for the day was recorded in addition to these three points (**Table 28**). 48% of visiting groups within the sample had either stopped off at a previous location before arriving at the survey site or planned to stop off after the survey site or both. 77% of previous stops were at other locations within the Park (**Table 29**) and 65% of visitors planned to make a further stop at an identified location within the Park with a further 16% undecided as to the exact location of their next stop (Tables 30 and 31). Coastal towns and beaches outside of the Park represented significant additional destinations over the course of the visiting day. The proximity of the New Forest to the coast provides the opportunity to combine rural and seaside experiences. Lue at al (1993) highlight how multiple stops can help to meet the often-differing needs and desires of individuals within visiting groups, noting how even within a small visiting group of two people or a single family, preferences may vary. This follows Wall's (1978, p35) assertion that recreation sites do not exist in isolation, but are instead found "within the context of competing and complimentary facilities". In the New Forest setting, the potential for a village or more remote location to stand alone as a destination is limited by the offer of facilities and attractions, as such calling at more than one location is a significant element of visiting practices. Furthermore, calling at multiple sites within the New Forest formed part of the visiting activity, for example a walk or cycle ride between locations. Survey sites also provided for focal points for moving around the Forest with visitors stopping for a short period of time. Stops provided for a change of transport mode, facilitating walking and cycling activities or providing access to the New Forest Tour.

 Table 28
 Summary of visitor itineraries

Visit Structure	N	%	%
Home - Survey Site - Home (day visitors)	201	31%	
Accommodation - Survey Site - Accommodation (staying visitors)	119	18%	52%
En-route to/from accommodation (staying visitors)	24	4%	
Multiple Stops (Day visitors)	121	18%	48%
Multiple Stops (Staying visitors)	192	29%	46%
	657	100%	
Missing answers	7		

 Table 29
 Summary of where visitors stopped off before arriving at the survey site

Stopped off at other NFNP sites (Inc. those riding the	
NFT)	61
Lymington	5
Barton on Sea, Milford on Sea	3
Ringwood	4
Other locations	6
Total	79

 Table 30
 Summary of where visitors planned to visit next

Another angific location in the New Forest National	
Another specific location in the New Forest National	4.70
Park	152
Pub/café (location not specified or undecided)	11
Pub/café specific	4
Walking/Cycling (location not specified)	9
Undecided	22
New Forest Tour (no specified destination)	4
Ringwood	9
Lymington	12
Bournemouth and Christchurch	6
Milford on Sea/Barton on Sea	2
New Milton	6
Other non-NFNP	15
shops	2
Other non-leisure ("back to work", "grandmother's	
house", "shopping ASDA")	4
Beach	1
	259
blank	20

 Table 31
 Examples of written comments from visitors who were undecided on next

 stop

Example undecided comments:
"Where it is nice to stop on the way"
"On a cycle loop, not sure where"
"We'll stop at a pub we like the look at for pub lunch"
"Not sure we will decide later in the day"
"Going to drive and see what takes are fancy"
"Wherever the bus takes us!!"

52% of the sample reported that they had travelled directly to the survey site from their home or accommodation base and would return to their home or accommodation afterwards. Walking and cycling were identified as activities amongst this group indicating that their visit was likely to have stretched beyond the survey site. 2% of visitors also identified that they were "passing through", suggesting that the distinction between travelling to a single site in the Park to undertake an activity was sometimes blurred with a visit to the Park as a whole. The extent to which visitors made single destination trips to the survey site only or planned multiple stops varied between sites (Table 32).

 Table 32
 Differences in visitor itineraries between survey sites

Survey Sites	Single destination visits	Part of a multiple destination visit
All sites	52%	48%
Bolderwood	27%	73%
Brockenhurst	56%	44%
Burley	39%	61%
Fritham	100%	0%
Keyhaven	62%	38%
Lepe	85%	15%

Different survey sites performed different functions. **Table 33** provides a summary of the activities respondents reported to be participating at the survey sites. Village centres provided opportunities to shop for food (although as visitors reported to be shopping for food at Fritham, where there are no shops it is likely that this selection may have taken an alternative meaning for example buying lunch at the pub). Brockenhurst was the most significant location for shopping for food which is consistent with **Table 24** above, which identifies a higher proportion of staying visitors from the surrounding campsites within the Brockenhurst sample. More isolated locations such as

Fritham provided a focal point for walking and cycling and visiting the pub. Bolderwood also provided for outdoor gatherings of larger groups which was evident from the observation and interview data with larger groups (excluding coach and minibus parties) also evident within the survey sample. Lepe is a country park serving the Waterside areas of Southampton but providing an additional attraction for tourists. Almost half of all visitors to Lepe stated that they were exercising dogs and 33% of the Lepe sample identified other activities which largely related to the use of the play area. A visit to Lepe, made by local day visitors may not represent a rural tourism visit to the New Forest National Park and previous survey data collected outside of the summer peak period shows a high proportion of local day visitors, with dog-walking representing a key activity at the site.

 Table 33
 Main visitor activities at survey sites

	Recreational Walking	Picnic	Cycling mainly off- road on own bikes	Cycling mainly off- road on hire bikes	Exercising Dogs	Shopping for food	Visiting café/pub/tearoom	Browsing the shops	Other
Brockenhurst	52%	10%	13%	9%	19%	38%	43%	54%	4%
Bolderwood	67%	42%	7%	6%	11%	0%	2%	5%	13%
Burley	69%	21%	8%	8%	22%	1%	56%	45%	7%
Fritham	80%	23%	9%	0%	29%	23%	80%	23%	0%
Keyhaven	67%	32%	17%	2%	26%	1%	18%	3%	11%
Lepe	78%	62%	4%	0%	49%	0%	26%	1%	33%
Lyndhurst	63%	22%	12%	2%	22%	9%	52%	48%	6%

6.4.3. Travelling with Children

The observations identified that the presence of children within the visiting group impacted on how transport was used. Family groups with children are shown to make greater use of car travel for tourism trips citing the importance of convenience and flexibility (Dickinson and Robbins 2008; Bohler et al 2006). Distances and difficult terrain may also present limitations to some members of visiting groups, for example children or less fit adults (Pezzo 2010). Further limitations when cycling with children are associated with perceived risk, with parents preferring to cycle on traffic-free routes when accompanied by children (Aldred 2015). **Table 34** compares mode of travel to survey sites for child-free groups and groups with children. Visiting groups that included children aged 5 and under had the lowest walking and cycling mode shares for travel to the survey sites.

Table 34 Summary of modal shares to survey site for adult only groups and groups with children

	Groups with no children (n. 405) %	Groups including children aged 5 and under (n. 90) %	Groups including children aged 6 to 15 (n. 112) %	Groups with children aged 11-15 only (n. 50) %
Car/van/motorhome/motorbike	59	81	77	54
Public Transport	5	8	7	6
Walking	14	7	6	8
Bicycle (hired and own)	15	3	10	23
Other (including minibus and Twizzy and coach)	7	1	1	0
Average Car Occupancy	2.3	3.8	(all groups witl	n children)

6.4.4. Travel to survey sites on foot and by cycle

Visitors staying in the New Forest have situated themselves within the environment that they wish to experience, with walking and cycling representing primary activities within rural tourism contexts. The combined effect of reduced distances and the scenic setting also applies to more local day visitors with a small number within the survey sample able to walk and cycle directly from their home. For other visitors, living and staying outside of the area, other modes were used to support their walking and cycling activities with the use of these other modes indicating the greater association of these activities with leisure (Dickinson et al 2009).

The blur in the function or meaning of walking and cycling is apparent in other studies. Both walking and cycling are increasingly encouraged as a means of staying active and are valued for this outcome whether combined with another purpose or not. **Table 21** above shows the importance of walking as a recreational activity during a visit to a survey site. Both walking and cycling are recognised as important modes of transport for utility and leisure purposes, however for cycling, there is sometimes a disconnect between transport and fun (Spotswood et al 2015).

Visitors using their own bikes identified a greater range of activities that they intended to partake in during the course of the day compared to those reporting to be using hired bikes. This indicates that for this group, cycling in the New Forest facilitated other activities rather than being the central or only focus of the visit (**Table 35**). For example, 18 responding groups did not specifically identify cycling as an activity and 12 planned to 'shop for food'. Visitors using their own bikes had less rigidity with regards to their plans with no necessity for fixed routes and destinations whereas hire bike users were temporally confined by the need to return their bikes to the hire centre within a fixed timeframe.

Table 35 *Planned activities at the survey site (own bike and hire bike users)*

Planned activities at the survey site	Own bike users	% of own bike users identifying activity	Hired bike users	% of hire bike users identifying activity
Respondents	66		19	
Recreational walking	14	21%	1	5%
Exercising dogs	3	5%	0	0%
Relaxing	18	27%	10	53%
Picnic	14	21%	3	16%
Watching wildlife	5	8%	5	26%
Cycling	48	73%	17	89%
Visit/café/pub/tearoo m	31	47%	4	21%
Shopping for food	12	18%	0	0%
Browsing the shops	10	15%	1	5%
Visiting castle/museum	5	8%	1	5%
Passing through	4	6%	3	16%
Parking/collecting the car	2	3%	2	11%
Cycling not selected	18	27%	2	11%

79% of visitors cycling unassisted to the survey sites (with no use of private vehicles over the three stages of the visit recorded) had travelled from origins within the Park and around its immediate periphery. Distance is an important determinant of walking and cycling trips, however in a leisure context the propensity to cycle is further influenced by the relative pleasantness of the route, longer distances may also be covered if cycling represents the focus of the day's activity. Over half of the hire bike users and 27% of the own bike users selected 'relaxing' as an activity they would be undertaking at the survey site. Where the main motivation for the cycle journey is a leisure or recreational activity, unpleasant sections of route, for example on busier roads, are avoided as much as possible even if this involves cycling over longer distances (Deenihan and Cauldfield 2015). Visitors within the sample also travelled to survey sites in private vehicles bringing with them their own cycles to undertake a bike ride starting at that location rather than their home or accommodation base. By initially transporting their own bikes by car, visitors were overcoming distance and route pleasantness/suitability barriers. This is also evident within the observation and interview data.

6.4.5. Travel to survey sites by bus

A total of 31 survey respondents reported to have used the train, bus or New Forest Tour to reach the survey sites. From analysis of the survey location, dates, previous and planned stops it was evident that several respondents reporting to use the Forest Bus Baby or Forest Bus were in fact using the New Forest Tour and the data was adjusted accordingly, this may reflect the shortening of the New Forest Tour as simply the "Forest Bus" alongside lower awareness of the other available services. 23 respondents had arrived at the survey site on the New Forest Tour and a further eight respondents had used local bus services. Of the eight groups, five were staying visitors and three were day visitors. More than half of the visitors travelling to survey sites by bus were aged 65 and over. The 'Tourism on Board' study (Guiver et al 2007) identifies the profile of passengers using buses within rural tourism destination areas finding that older people with limited or no car availability make up the greatest proportion of users. The New Forest Tour presented a different passenger profile which included family groups with younger children and visitors from overseas. A short survey undertaken by the NFNPA in 2011 (NFNPA unpublished) identified that 48% of passengers travelled to reach the New Forest Tour by car emphasising the positioning the Tour as an experience rather than a means to reach specific destinations and indeed this approach to provision represents an element of the Authority's strategy in developing a commercially viable service. The function of the NFT is explored further in the following chapter.

6.5. Visitor Comments

At the end of the survey, visitors were asked to rate their visit and what made the New Forest special to them. 97% of visitors rated their visit as either 'very high' or 'high'. Comments on what made the area special centred around aspects of the rural tourism experience. **Table 36** provides a summary.

 Table 36
 Summary of themes identified within all visitor survey comments

Comment Themes	% of all comments
Naturalness/wildlife/animals/outdoors	34%
Scenery/landscape/villages/uniqueness	20%
Getting away from it all/peace and quiet/fresh air/relaxation	17%
Activities/food and drink/trails/walking/cycling/camping/New Forest Tour/driving/shops and cafes	17%
Friends and family, children, dog-friendly	9%
Facilities/accessibility/proximity to home/parking	2%
	100%

The survey asked visitors whether there were any aspects of their visit that they did not like. 59% either didn't answer this or stated that there was nothing that they had not liked, the remaining 41% of respondents identified an issue in response to this question. 70% of comments related to transport (46% to traffic volume, speed, noise and congestion). **Table 37** provides a summary of the main themes identified within these comments. Awareness of the negative impacts of transport and visitor interpretation in the context of their visit is explored in further detail within the following chapter.

 Table 37
 Summary of aspects of visit not liked by visitors

Comment Theme	Number of comments	% of all comments
Traffic related comments (speed, volume, congestion, noise, air quality)	127	46%
Other transport issues (parking availability, parking charges, signage on walking and cycling trails, surface condition of tracks, absence of footways and provision for cyclists on roads)	25	9%
Cyclist and driver behaviour	10	4%
Potholes/road and car park surface	29	11%
Too busy	20	7%
Information provision	7	3%
Availability of facilities (bins, shops, cycle tools, cafes, seating, baby)	27	10%
Other (including visitor behaviour, dog mess, litter)	30	11%
	275	100%

6.6. Summary

The survey data emphasises the importance of accessibility, both in terms of distance between origins and destinations and the availability of supporting transport infrastructure. Distance underpins the propensity to walk and cycle in wider contexts, for

instance in England and Wales 42% of journeys to work for distances 2km or less are made on foot, falling sharply to 7% for journeys to work between 2km and 5km (Census 2011). Distance is a key determinant of how these modes are used in rural tourism with only the most local day visitors and staying visitors with accommodation within the immediate area accessing facilities without the additional use of motorised vehicles. Compared to a more utilitarian context, walking and cycling have additional elements of meaning as they represent a means to experience the environment in a way which is consistent with the motivations for rural tourism. In this way visitors may travel longer distances but seek to avoid less pleasant routes which may further contribute to the longer distances travelled.

Survey sites are shown to have differing levels of non-car access with some sites having been developed as visitor attractions in the absence of public transport and indeed these sites will have originally been opened up to visitation thanks to the growth in the availability of private cars. Cars also allow visits to incorporate dispersed stops in both time and space. As a result, within the New Forest, there exists a high degree of 'lockin' to car use resulting from distance barriers, an absence of public transport alternatives, the wider materiality of the visiting practices that car transport facilitates (e.g. camping and cycling) and the evolution of complex visit structures extending from the flexibility afforded by car travel. The extent of this lock-in is increased when the varying competences of visiting group members are considered, with younger children having a reduced walking and cycling mode share for travel to survey sites.

The survey shows that transport can be the material element that facilitates broader practices by providing access (e.g. travelling to the Park to take part in activities) or it may represent a significant focus of the visit (e.g. a cycle ride between locations within the Park). This has implications on how elements of practice are identified and positioned, in particular the extent to which non-transport elements are included within the analysis. The examples in Chapter 3 show how transport use has been described as the practice in its own right (Cass and Faulconbridge 2016, bus and cycle commuting) or how it can sit within non-transport practices (Hui 2012). Travel to reach an accommodation base could be considered with respect to the elements relating primarily to the journeys between home and the destination. However, the analysis of the survey indicates that the use of non-car modes (coach and rail) provides for different holiday experiences (shorter stays, urban and catered accommodation bases) whereas travel by car supports a broader range of holiday choices and activities with the materiality of rural

tourism necessitating the cargo role of the car. In this way the mode of travel used to reach an area at the beginning of the stay is situated within wider holiday practices and consideration of transport use for journeys in isolation overlooks interlinking elements. Transport modes are integrated into rural tourism visiting practices for the purpose of access, to contribute to the visiting experience by providing a means to enjoy the surroundings or both. The distinction between transport for access and experience is blurred and transport use can be described as existing on a continuum with transport for access only at one extreme and transport purely for recreation at the other, the latter presenting itself more centrally within the visiting practice.

7. TRANSPORT USE WITHIN VISITING PRACTICES

Introduction

The visitor survey demonstrates the extensive role of private motorised vehicles (cars, campervans, motorhomes) in providing access to the New Forest and how use increases when accessing locations which are remote from journey origins and where public transport services are absent. Public transport users are shown to be drawn from more niche visitor groups whilst walking and cycling facilitates access and movement from mostly local origins. Conversely car use is incorporated into the practices of a broad spectrum of visits. Private vehicles are also shown to provide a significant passenger transport role as rural tourism trips are rarely undertaken alone and visits to the New Forest are shown to provide an opportunity for larger gatherings of friends and relatives. Private vehicles are also important in supporting the materiality of rural tourism activities such as camping and cycling and provide for complex geographically and temporally dispersed activities. Therefore, within a significant proportion of rural tourism visits (67% of surveyed visits to the New Forest survey sites and 93% of all journeys to reach accommodation in the Park were facilitated by private vehicles) private vehicles and their supporting infrastructure represent essential material elements of practices. Qualitative details within the visitor survey indicate that private vehicles also contribute elements of meaning to practices. Within this chapter the observational evidence and interview data are used to provide for further understanding of how transport use contributes elements to rural tourism visiting practices.

7.1. Car Use

7.1.1. Car Ownership

The ubiquity of car use in visiting practices can be attributed to a dominant system of automobility (Urry 2004). This system is underpinned by the widespread availability of vehicles and road infrastructure. In the UK, 77% of households have access to at least one private vehicle (DfT 2016). The car provides an existing resource for both everyday mobility and less frequent tourism visits for most UK households. The researcher observed how her existing car ownership presented itself as a baseline choice when

planning travel to the New Forest and Bournemouth. The researcher's car represented a sunk cost, a financial commitment that had already taken place well in advance of any visits to the New Forest. The sunk cost fallacy (Arkes and Blumer 1985) suggests that car use can be influenced by costs that have already been incurred. Against this baseline it was observed how travel by rail to access the New Forest at the beginning of a stay compared unfavourably in terms of cost, the ability to transport luggage and cycles and undertake further travel during the stay. Rail travel was therefore only utilised for shorter visits made alone and then only following the development of new competencies to reduce the cost. It was necessary for the researcher to purchase a Young Persons railcard and split segments of the journey to reduce the cost requiring the development of further skill to match up seat reservations for the segments of the journey.

Whilst the cost of alternative modes to car travel was reflected upon by the researcher, this theme was not explored with the interview groups, although one group identified constraints on transporting luggage and the additional costs of travelling by rail when accounting for all members of the group:

Lyndhurst 2 (2015)

"I would say it would be very costly, plus. On your own you would probably think about it. To the New Forest, we bring so much, you need your wellies and you have to bring so much. Surely if there is two of you it just pays to come in the car."

Further discussion highlighted that 'Lyndhurst 2 (2015)' had limited knowledge of rail services to the New Forest, not realising that fast and largely direct services were available despite having visited many times previously. However, the interviewee was accurate in their understanding of the additional cost of rail travel when accounting for additional passengers and, in the absence of the competencies developed by the researcher, the interviewees detailed above were unlikely to have been able to secure reductions in cost. Leisure journeys by car are comparatively cheaper and the cost of each additional passenger carried is close to zero until capacity is reached (Robbins & Dickinson 2007). Lyndhurst 2 (2015) had travelled from the West Midlands from which direct and potentially faster travel by rail was possible and indeed the couple experienced congestion on their journey which they described as "horrendous". However, this option is compared against the baseline of their existing car and its running costs with these infrequent rail users unlikely to be in possession of railcards for obtaining discounted travel. The economic and practical disadvantages of travelling by rail represented an

irrational choice set against this backdrop and therefore limit the available competencies of car owners to utilise other modes:

Lyndhurst 2 (2015)

"And another factor into the equation is I have got a new mini which does like 80 miles to the gallon it's a threecylinder diesel, so it doesn't cost very much money at all to run. You fill the tank up and it seems to last forever, so need to weigh that up as far as public transport is concerned."

Car ownership is both an aspect of travel behaviour which is explained by variables such as life-stage, income or mobility requirements and as a variable which itself influences mode choice (Van Acker and Witlox, 2010), with its ready availability reducing the propensity (or in this case the rationality) to use other modes. Ho and Mulley (2013) found weekend car use to be strongly linked to household car ownership, with weekend public transport users mainly represented by 'captive users' (no car households). This is demonstrated within Guiver et al's (2007) study of the use of rural tourism bus services within which passengers largely comprised of those without access to a car, people visiting alone, older couples with concessionary passes and visitors from overseas, emphasising how car access provides for the default mode for rural tourism visits. This commitment to vehicle ownership and therefore, use for leisure purposes was implicit within the interview groups with respect to the ownership of motorhomes and caravans:

Brockenhurst 2 (2015)

"we might have two weeks abroad, or take the caravan you know somewhere for a couple of weeks sometimes here, sometimes at home, sometimes abroad...it's probably a second, mainish holiday, we try and get two or three in a year"

Cars are incorporated into more everyday practices such as commuting, and shopping and their use is readily extended for the performance of rural tourism practices. Indeed, camping and caravanning practices are extensions of car ownership. Øtsby (2014, p294) describes how in the 1950's camping became a "showcase for the private automobile". Car use is strongly linked with freedom and new vehicles are frequently advertised within a backdrop of the natural environment. The increasing popularity of Sports Utility Vehicles (SUV) has been built on the premise of escaping everyday urbanity (Gunster 2004) with sales of SUVs representing an increasing share of the

market for new cars in the UK (SMMT 2018). Households with limited car use on a day to day basis, particularly where urban areas may lend themselves to shorter trip distances or with the availability of high frequency public transport, have been found to instead focus their car-use on longer leisure-based trips (Naess 2006). Campervans, motorhomes and caravans are 'strategic goods' (Gredal 1966) with long term implications on future leisure use making them an inevitable material element within visiting practices for their owners. Mikkelsen and Cohen (2015) note how caravans are enabled by vehicles albeit to then be largely immobile during a holiday. The visitor survey identified that 39% of visitors staying in campsites in the Park were in fact staying in caravans, campervans and motorhomes representing a commitment to ongoing private transport-based rural tourism.

7.1.2. Familiarity

Travel by car benefited from a consistent approach to signage and road markings with driving skills readily transferred from other contexts. The road network provided comprehensive coverage whereas public transport provided for access to the rail connected villages and Lyndhurst only. The ease of access by car and comparably poor access by other modes, particularly from the holiday parks was observed.

Within the Park, congestion was observed to represent the only significant constraint to car travel. Once this had been experienced by the researcher, most notably on the A34 near Oxford and on the approach into Lyndhurst, strategies to avoid future delays were developed such as re-timing of journeys and re-routing. The researcher used Google Maps to identify alternative routes into the New Forest:

"I am now very familiar with the New Forest and I routed to the hostel via the A31 exiting at Burley services and passing through the village."

(Burley YHA, August 2016)

"We arrived in the early afternoon having travelled from the Midlands in our car. The journey along the M40 and A34 provided the opportunity to help my daughter with her homework. I routed via Beaulieu to avoid congestion at Lyndhurst."

(Roundhills Campsite, 2016)

The interview groups provided further evidence of the development of strategies to avoid congestion linked to prior knowledge and familiarity of the local road network.

This builds on the premise that congestion may lead to the avoidance of an area or the loss of time for the participation in leisure activities (Lawson 2001) with interview groups largely avoiding Lyndhurst, therefore limiting the impact on their overall leisure time in the area. All but two of the interview groups had visited the New Forest before and previous experiences of serious congestion, mostly associated with travel through Lyndhurst, led to the re-timing and re-routing of journeys:

'Bolderwood 3'

"...that's why we get here early. You have just got that busy road, one road in and out pretty much from Lyndhurst that's really congested, if you don't get into Lyndhurst early in the morning do what you have got to do and get out its busy."

'Brockenhurst 2 (2015)'

"Basically we come down the A31, the A3 and the A31 and then pick up the M3 and the M27 and we come off at Fawley which avoids that big long tailback into Lyndhurst"

'Bolderwood 8'

"It was alright wasn't it? Yes, it wasn't too bad, yes, a little bit of traffic, we won't go as far as Lyndhurst, that's the thing once you get any nearer to Lyndhurst, you go on to Lyndhurst it would have been a nightmare"

Interview groups also described how they decided to change their route on the day of the visit in response to prevailing traffic conditions:

'Lyndhurst 1'

"No it wasn't too busy was it? Because this morning from Ferndown, we went along the motorway and oh my god both ways! That's why we have come this way back because it was so busy because I live over in Ferndown and we thought we can't go that way back, so we will come through this way"

Experiences from previous visits are shown to build competencies with the effect of further reducing the effects of constraints to car travel. The visitor survey demonstrated the high level of repeat visitation and familiarity amongst the visitors to the New Forest, particularly amongst day visitors who were largely drawn from the surrounding urban areas and as such were already familiar with the local road network. Those who were new to the area had typically travelled from overseas or were represented by staying visitors from other regions in the UK.

Parking in village centres represented some additional constraint with greater competition for spaces and the need to have change available to pay for parking. At times the researcher used parking outside of village centres:

"We parked in the car park adjacent to the cricket pitch just before entering the village, I have used this before, it's free here and I have seen reviews on TripAdvisor that suggest using free FC parking instead of parking in the village. I don't mind paying for parking, but I had no change left so would have been a hassle."

(Bournemouth, February 2016)

Free car parks around the Park typically had available spaces with the exception of the car park on the periphery of Burley and at Bolderwood which were observed to be busier and reach capacity, especially on warm summer days. Drivers were observed to wait for spaces to become available and also to park on the verges (see **Photo 1**). Car parking spaces along the sea front at Lepe Country Park were observed to become occupied before other spaces in the car park.



Photo 1: Bolderwood

Cars parked along the verge as the car park was full

Leaflets advertising attractions within the Park were displayed in hotels in Bournemouth, see **Image 1** (Forest Leisure Cycling no date) and **Image 2** (Beaulieu Enterprises Limited no date) emphasised how the New Forest could be readily accessed by car, positively framing car travel to attractions with the reassurance of the availability of free parking or details of where parking would be available.





Image 1: Leaflet advertising New Forest Cycle Hire (Forest Leisure Cycling 2016)

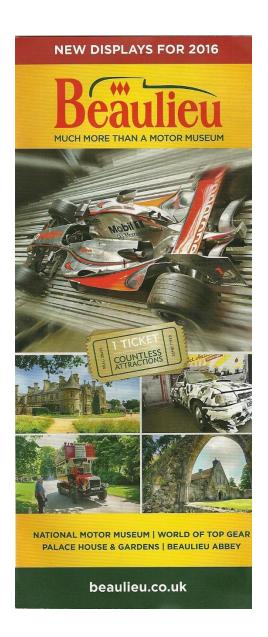




Image 2: Leaflet advertising Beaulieu Motor Museum (Beaulieu 2016)

7.1.3. Cargo and Storage

The cargo-carrying role of the car is well established with respect to shopping trips with many studies highlighting both its perceived and real necessity for this journey purpose (Cass and Faulconbridge 2016). Leisure cycling is identified as being increasingly car-dependent particularly with respect to the development of linear cycle routes utilising old rail track beds (Charlton 1998) and the visitor survey identifies that a proportion of visitors to the New Forest rely on private vehicles to transport their cycles to use in the Park.

The car's role in carrying luggage, camping equipment and bikes represented a key factor in supporting the researcher's planned activities during visits to the New Forest.

The availability of the car extended the range of activities that could be enjoyed, helping to maximise the use of leisure time available with family and friends (e.g. swing-ball when camping, body boards, BBQ). The use of extensive equipment brought from home was observed in Bolderwood and Linford Bottom where groups of visitors brought with them chairs, small tents to shelter from the weather, outdoor games and extensive picnic equipment:

'Bolderwood 6'

"...we can just chill out and be with family and you can do what you want just fill the car with all sorts of games and just do whatever you want to do."

Except for back-packing, or cycle-camping, evidence of which was limited within the visitor survey (6% of visitors staying in campsites had arrived by non-car modes), camping represented a car-dependent practice (Cass and Faulconbridge 2016). For the researcher, the purchases of tents, folding chairs and airbeds were all made in the understanding that camping trips would be facilitated by car. The car played a further role within the campsite, adding privacy, shelter from the wind and helping to define the camping area in the absence of designated pitches (see **Photo 2**).



Photo 2: Camping at Roundhills

With the absence of formal pitches in 'Camping in the Forest' sites in the New Forest the car provided for additional definition of the camping area whilst acting as a windbreak.

The role of the vehicle in marking out a personal camping area in the absence of formal pitches, was observed within the campsites and was also highlighted by 'Lyndhurst 4 (2015)' who described how they had refrained from using his motorhome during their stay in order to retain their pitch area.

The car's cargo role and its additional function for lockable storage was important factor for the researcher when deciding how to travel. When travelling to Bournemouth from the New Forest, the researcher's preference would have been the train following a long day driving to Heathrow earlier in the week but the need to transport and store leisure equipment outweighed the benefits of travelling by train:

"I was keen to not to drive, getting the train to Bournemouth from New Milton was problematic because they wanted to bring body boards, wetsuits and a windbreak and I thought that Bournemouth station would be too far from the beach to carry all of these items and we would also be unable to go into town with all of this equipment whereas the car would provide for storage space. Driving into Bournemouth was very slow and quite stressful, and I didn't know where the best place to park would be, so I ended up in an expensive multi-storey car park near the International Centre as such we still had a fair walk to the beach along some busy roads."

(Shorefields Holiday Park, August 2015)

Vehicles provide the only lockable storage available to visitors staying within tents and this storage was necessary when taking part in other activities requiring equipment. Car use is observed to be embedded within other recreation activities by enabling the transport and storage of larger items. In this way other significant material elements can be incorporated within car-based visiting practices that are not so readily supported by public transport. This is evident within the survey data with visitors staying in campsites having higher car mode shares when initially accessing the area.

The researcher transported cycles to the area within her car and used the car during stays to reach preferred locations for cycling. For example, transporting bikes by car to Lymington to then take them on the ferry to use on the Isle of Wight and transporting bikes by car from Shorefields to Brockenhurst where additional bikes were hired for use by other members of the group. Interview groups also described how they had

transported their cycles into the area by car to preferred locations for cycling. Brockenhurst 2 used their van to overcome the initial distance and route barrier between their accommodation in Lymington and the New Forest where they chose to cycle on most days of their stay:

'Brockenhurst 2'

"We don't even come with a car, we have got a van so we can fit our bikes in...we literally get to the first car park and unload...we see the car as a pain in a sense we are just wanting to be shot of it as soon as we can but very definitely not wanting to be on open roads with heavy traffic dashing in and out of cars"

In these examples, cars are used not only to overcome distance barriers but also to avoid unpleasant sections of road overcoming deficiencies in provision for cyclists and maximising the leisure experience.

7.1.4. Shelter and Space

On most journeys made by the researcher to the New Forest the car was occupied by two passengers and on the final stay at Roundhills campsite, the researcher was joined by three passengers, two of which had already driven an initial journey leg from Sheffield. Travelling with family for leisure purposes presents a different experience to that of commuting (Anable and Gatersleben 2005; Mokhtarian and Salomon 2001). The car provided for a social space and represented an opportunity to discuss school work, chat and listen to music. The wider role of the car in providing space and time for family interaction is established, for example Sheller (2004, p17) specifically notes how car journeys provide an important setting for "clawing back quality time in busy family schedules". Longer journeys within a domestic tourism context, particularly when travelling for overnight stays, provided for an extended period of time spent with family and friends. For longer journeys for holidays travelling to the destination is an enjoyable part of the overall experience with time spent in the car valued as quality time spent with family (Price and Matthews 2013).

The car provided a space to shelter from the weather within a context which focuses on experiencing the outdoors. Sea-front car-parking layouts at both Lepe Country Park and Milford on Sea allowed for the enjoyment of the view across the sea to the Isle of Wight from within the vehicle:



Photo 3: Parking at Lepe Country Park

Car parking spaces were positioned to allow the occupants views across to the Isle of Wight

By eating in the car, the researcher was able to enjoy the scene despite inclement weather.

"On one evening I drove to Milford on Sea for fish and chips and to give my son a chance to see the sea and the views across to the Isle of Wight. On this occasion we parked overlooking the sea while we ate our food in the car as it was quite windy, there were several other people doing the same thing." (Hoburne Bashley, August 2014)

In this way the car and the sea-view parking spaces contributed additional material elements of the visiting practice. Being able to eat whilst enjoying the view of the sea added further meaning to the visiting experience.

7.2. Public Transport Use

Information highlighting the ease of access by car extended the car-based competencies to visitors with less knowledge of the area, particularly, visitors staying in nearby urban areas wishing to make day excursions to the National Park. Equivalent information for visiting the New Forest by train and bus was not available within these

displays however for most attractions these modes did not represent viable alternatives. Within the visitor survey just 1% had arrived using local bus services and none of the interview groups had used the local bus services. The researcher observed that her own use of bus services presented a degree of uncertainty:

"Another passenger offered information on where to catch the bus for the return to Brockenhurst given that the one-way system could be a little confusing. Despite this advice I struggled to understand where to catch the return bus and ended up walking out of Lyndhurst along the A337 where I could be sure that the Forest Bus would be routing."

(Burley YHA, August 2015)

Those who typically travel by car are less familiar with local bus and rail services (Blainey et al 2012). Furthermore, within a rural setting supporting infrastructure such as bus shelters with specific timetable information may be absent in more remote locations. In the example above, the bus stop near Holmsley Campsite was just a pole and no specific times for the NFT for this stop were provided, instead the researcher had to estimate the time based on distances to the village centres for which times were provided.

Other National Parks have developed visiting information focused around public transport use however within the New Forest the coverage of bus and rail networks presented significant limitations which were not mitigated by the NFT therefore the required material elements for the development of rural tourism visiting practices incorporating bus use were absent for large areas of the Park. The New Forest Cycle Hire leaflet (Image 1) highlights that the NFT routes through Burley although no further details are provided. In the case of the two examples above (and also applicable to other visitor attractions in the Park, such as Exbury Gardens, Buckler's Hard and the New Forest Wildlife Park) car travel represented the only realistic mode of transport for access. More detailed review of the use of the New Forest Tour demonstrates that serious limitations exist in terms of time and cost when combining the use of the Tour with any extended paid for activity.

"The New Forest Tour provided connections from Hoburne Bashley to attractions within the National Park but use of the Tour for this purpose presented significant time-constraints. For example, a trip to the Beaulieu Motor Museum from Hoburne Bashley would have allowed for little over three hours at the attraction (see Table below) whereas it is recommended that 4-5 hour is allowed for a visit."

Summary of Hoburne Bashley to Beaulieu Motor Museum trip times

Stage 1: 1018	Depart Hoburne Bashley Blue Tour Bus
Stage 2: 1116	Arrive at Lymington
Stage 3: 1145	Depart Lymington on Green Tour Bus
Stage 4: 1207	Arrive at Beaulieu Motor Museum
Stage 5: 1522	Depart Beaulieu Motor Museum on Green Tour
	Bus
Stage 6: 1657	Arrive in Brockenhurst
Stage 7: 1710	Depart Brockenhurst on Blue Tour Bus
Stage 8: 1803	Arrive at Hoburne Bashley

(Hoburne Bashley, August 2014)

The price of the NFT and the lengthy one-way circular routes emphasised its role as a Tour and the researcher and the interview groups used the bus accordingly spending a substantial part of the day on the bus.

"On this occasion I didn't have the benefit of complimentary tickets and was unprepared for the cost of the ticket for the three of us (£31 - £8 each for the girls and £15 for me). After paying for the ticket I was less keen to also pay for hire bikes (£51 for three bikes from Burley for a full day as the girls would need adult bikes - it turned out that half day hire would be available only after 2pm and then it would be subject to availability – see leaflet below) and instead suggested that we have lunch and a walk."

(Shorefields, August 2015)

Interview groups described how they spent their time primarily on the bus and sought to complete the NFT's routes. Lyndhurst 2 spent short periods between buses at Lymington and Lyndhurst and planned a further short stop in Brockenhurst to change buses:

Interviewer "So do you know where you are going to go next?"

Lyndhurst 2 "I say the children will be having an ice cream and that

here, so we are going to catch the half past two bus to Brockenhurst but then we just change buses at Brockenhurst and then go back to New Milton, we are not visiting anywhere else... So its just a nice days ride round

on a bus basically."

Interviewer "So you arrived about two. How long do you reckon you

will stay in Lyndhurst for?"

Lyndhurst 5 "Until the next bus... Well we have done part of the Blue,

 $we \ picked \ the \ Red \ up ... we \ went \ to \ Burley. \ We \ did \ the \ other$

bit last Thursday and we finished off the last bit today."

Interviewer "So when you caught it last time did you go to anywhere or

were you just mainly sat on the bus because there are quite

a lot of offers in the book?"

Lyndhurst 5 "Well the blue route, initially we just did the full circle

didn't we because it was Lymington to Lymington, stopped changed at Lymington onto the green and then we had to

stop at the Exbury Gardens because the bus broke down"

Within the visitor survey just 3% of visitors arrived at survey sites on the NFT, users were also limited within the interview groups. The researcher's attempt to purchase a single hop ticket on the NFT further emphasised its positioning primarily as a tour:

"The New Forest Tour arrived at the station not long after my arrival and along with a couple I tried to buy a single hop ticket to Burley, the couple were staying in a hotel in the village. The driver refused to sell us single tickets, reiterating that it was a tour bus and that he simply didn't have the function on his till."

(Burley YHA, August 2015).

Guiver et al (2007) identify how public transport services can form part of the visiting experience, providing for novelty, relaxation and the opportunity to enjoy the view and this was evident from the researcher's own observations.

"It was a wet day, but I wasn't alone in choosing to sit upstairs to take-in the scenery despite being exposed to the weather, there was a sense of camaraderie amongst the passengers as we joked about the absurdity of sitting on an open top bus in the rain and this added to my enjoyment of the trip."

(Hoburne Bashley, August 2014)

Interview groups also reflected positively on their experiences of riding on the NFT indicating that the service provided additional or different elements of meaning to moving around the area by car:

'Lyndhurst 2'

"I do the driving anyway so its nice to just sit on the open top bus and you can see...plus on the open top bus you can see a lot more than you can in a car anyway because you are higher up. So its just a nice days ride round on a bus basically."

'Lyndhurst 4 (2015)'

"...we said lets get on the bus and that was the right decision because we were able to then get on the bus find out some things about the New Forest even though we have been coming here for many years, lots of things we didn't know about"

'Lyndhurst 4 (2015)' is referring to the on-board commentary detailing New Forest Facts.

7.2.1. Travel to Accommodation by Rail

Rail travel was observed to provide an adjunct to car use, with cars being used to collect friends and family arriving separately (and individually) by rail from other origins and at different points during a week's stay capitalising on the flexibility of staying within self-catering accommodation. The interviews provided further examples of individual group members arriving independently by other modes:

'Bolderwood 1'

"So we left Derby at about eight o clock, we met Alex, picked him up in Oxbridge. Sharon came down driving from London and picked Victor up at the station. I got the train down from Waterloo and it was like two hours to Hinton Admiral."

'Lyndhurst 4'

"Yes, we are picking our daughter up soon actually...She is in Jersey, we come from Jersey and she is coming over. She is coming to Southampton Airport."

As within the visitor survey, rail use was limited amongst the interview groups. Just three of the interview groups included members who had travelled to the area by rail for staying visits. These groups all comprised of adults travelling as friends and were therefore likely to have paid for their journeys individually. Interviewees also demonstrated that they had accrued high levels of rail-use competence over time.

'Lyndhurst 9' were a group of three women aged 55 to 64 and 65 and over, staying three nights in Ashurst for a cycling holiday. One of the women had travelled from Edinburgh by train and described her journey by rail:

'Lyndhurst 9'

"It was perfect, it was Virgin from Edinburgh to King's Cross then I hopped across the road to St Pancras International and got a Thameslink train to Three Bridges and then I changed onto the local train to Horsham which is where Julie lives and I have come the rest of the way in her car with the bike...and the only reason we have come in the car is because there is a rail strike next week, Southern Rail, they have just been in a right old mess for a long time"

It was a journey she had undertaken before having visited the New Forest the previous year with another group of friends and as such she had experience of where and how to change trains and had therefore developed the competence required to undertake the journey.

'Burley YHA' were two women aged between 45 and 54 on a cycle touring holiday, who after completing the Devon Coast to Coast cycle route had chosen to return via the New Forest. They had originally travelled to Devon from their homes in East Sussex and had therefore used the train to visit the New Forest on the way home.

Westbury to Southampton Central. Southampton Central, should have been to Sway but we couldn't get off, so New

Milton"

'Interviewer' "So you had quite a few changes there with your bikes, but

you were okay with that?"

'Burley YHA' "We are used to it."

'Interviewer' "Do you remember the first time you put your bike on the

train? Or have you been doing that long..."

'Burley YHA' "Yes I have been doing it a few years, yes, I think its great,

I like trains but you don't always get on, that's the

trouble...but we booked these, the bikes are booked on."

From the interview, it was evident that the 'Burley YHA' cyclists had built up experience of travelling on the train with their bikes, as regular cycle tourists they also had bicycle-specific luggage that fitted to their cycles making it possible to wheel bikes onto trains with their luggage attached. They identified the need to book spaces for the bikes and purchased rail tickets two months in advance of their trip:

'Burley YHA' "...we always book them in advance because you get them cheaper then and I think we actually booked the trains in June."

7.2.2. Public Transport Use for Day Visits

Just one of the interview groups were visiting the New Forest for the day by train. 'Brockenhurst 3 (2015)' were a couple both aged 65 and over who had made the trip to Brockenhurst from their home in Fareham, Hampshire, as one of several day excursions using a rail rover ticket. The rover ticket allowed them unlimited travel for eight days during a two-week period across a section of the south west rail network. During the interview, it became clear that the couple had in-depth knowledge of routes and ticketing and were committed rail users holding Senior Railcards to reduce the cost of their journeys. The couple owned a car and had bus passes and made use of these modes alongside rail services:

'Brockenhurst 3 (2015)' "we use the train a lot now because the roads are getting so congested"

Older adults within the interview groups described a preference for avoiding driving in congested conditions. Whilst they continued to maintain car ownership, they also made use of public transport services benefiting from free off-peak bus travel. These interview groups had travelled to the New Forest by car but described how they would use the bus for other journeys. For example, 'Bolderwood 8' were a couple aged 67 and 69 (both bus pass holders) who were interviewed whilst enjoying a picnic at the Forestry Commission site at Bolderwood.

'Bolderwood 8'

"We walk, drive but we try not to use the car unless we have to. I used to walk, probably a bit far at the moment, from Highcliffe to Lymington along the coast 11 miles and then catch the bus back and we walk round. Quite often we get the bus into Bournemouth and then the 50 bus. Or walk

to Bournemouth and get the bus back. The bus to Swanage and we walk all the way from Swanage back to Bournemouth."

'Lyndhurst 6' was a man over the age of 65 who was visiting alone from his home in Wimborne, approximately 16 miles to the west of Lyndhurst. Although he had used his car to travel to the New Forest stating that there was no other way of getting there, he described how he limited his car use for other journeys:

'Lyndhurst 6'

"...I use the bus as much as I can, because of parking really I wouldn't think about parking down in Bournemouth because I can use the bus to get in there. I don't have to worry about time restrictions and they are fairly regular so I would tend to use buses rather than my own car."

25% of visitor groups within the survey sample included one or more adult aged 65 or over. 48% of groups including older adults comprised of couples aged 65 and over. Adults in this age group are over-represented in the survey sample when compared to the population in general. This trend is also apparent within National datasets with 23% of domestic tourism overnight trips and 18% of domestic day visitor trips to rural destinations in 2015 being undertaken by adults aged 65 and over (Visit England 2017). Older adults represent a growth area in leisure travel in respect of the ageing population (Glover and Prideaux 2009) and have a greater propensity to use bus services in rural tourism areas (Guiver et al 2007) with free travel on local bus services for those aged 66 and over (bus passes are not valid on the NFT although a discount is given to visitors over 60. However, for the above interview participants local bus services in the New Forest would not have supported their activities on the day of their visit and would have presented practical disadvantages over car use.

Some interview participants staying in and around the New Forest and in Bournemouth identified destinations that they would travel to by train during their stay. 'Brockenhurst 2 (2015)' who had been holidaying in the New Forest for "the last 25-30 years" mentioned how they would sometimes use the train to get to Lymington:

'Brockenhurst 2 (2015)'

"We have caught the train once or twice into Lymington rather than faff around, a bit like London, you know if you can catch the train you haven't got to park and it runs to time that's always helpful"

'Lyndhurst 1 (2015)' were on holiday for the week in Bournemouth. Whilst they had driven to the New Forest on the day of the interview, they described how they had used the train to visit Weymouth earlier in the week:

Interviewer "Was there a reason you went on the train rather than your car?"

'Lyndhurst 1 (2015)' "We like travelling on the train, just for a change, its more relaxing."

'Lyndhurst 1 (2015)' were visiting the New Forest that day to coincide with attending a football match in Bashley, as such travelling by train to the New Forest would have significantly reduced the feasibility of achieving both objectives. Despite using the train to reach Weymouth, when reflecting on whether you could visit the New Forest without a car, they considered that it would be less convenient.

'Lyndhurst 2' who were staying at Hoburne Naish Holiday Park near New Milton also described how they would also get the train to Weymouth during their stay:

'Lyndhurst 2':

"Yes it takes you about an hour, an hour and ten minutes.

It's much easier than driving, plus Weymouth, it's a bit of an awkward place, there are plenty of car parks but again you have to drive around, the station is only 100 yards from the beach."

'Lyndhurst 5 (2015)' were camping for the weekend in the New Forest and during the interview mentioned that they may use the train to visit Christchurch. Their reasoning for not using the car was to allow them both to drink.

'Lyndhurst 4 (2015)' had selected to camp at Ashurst rather than their usual site so that they would be able to make use of the train to travel to Southampton to attend a football match during their stay:

'Lyndhurst 4 (2015)'

"...this way we can actually walk across to the railway station and just go by train and come back by train and walk back and we are not worried about arriving back in the dark or that sort of thing."

With the exception of 'Lyndhurst 2' who was a former railway worker and was entitled to free rail travel, none of the interview groups using the train during their stay were regular users of rail services. Their descriptions of how they used or intended to use

rail services all identified benefits over car travel in terms of avoiding looking for and paying for parking, providing direct access to the beach (in the case of Weymouth) or allowing for the consumption of alcohol. Dallen's (2007) segmentation of rail users identifies staying visitors undertaking excursions within the area making use of the rail service largely for practical gain being otherwise 'contented car users' who would typically prefer to travel in their own vehicle. This group were more likely to have considered the advantages and disadvantages of their mode choice. Rail services are therefore used by some committed car users to gain a practical advantage. In the context of the New Forest practical advantages are more available to car users with few restrictions on parking and movement, comparatively cheaper travel for groups and the cargo capacity to support the rural visiting practices that have developed.

For some interview groups travelling by train may have represented an alternative to using their car with respect to their home origins in Bournemouth or Southampton, but they identified the limitations that this would place on their visit. 'Bolderwood 15' lived near the station in Bournemouth and had made their previous visit to the New Forest by train but on the day of the interview had chosen to travel by car. This was partly influenced by the decision to visit Bolderwood which in turn had been influenced by suggestions for walks sourced from the internet that day and a limited knowledge of other visiting experiences that could be accessed by rail:

Interviewer

"Okay, so you go to the New Forest...on the train before, to Ashurst, did that take a lot of planning to think I am going to go on the train? Would you consider doing that more or...?"

'Bolderwood 15'

"I think it just depends, because we wanted to come here its more harder to come here whereas when you go to Ashurst obviously there is the pub/restaurant which is on the station."

'Bolderwood 15'

"Do you know what I think it is? I think it is about knowledge, like I don't know the New Forest very well so it's difficult to know what train stations are in the New Forest and what train stations have...what's available to do from there. I spent 20 minutes before we came out just having a quick scan of where we can go and what we can

do and its not clear really...I didn't even know you could hire bikes from the station."

'Bolderwood 9' who were visiting for the day from Southampton further identified the potential limitations of visiting the New Forest with respect to accessing preferred locations and the need to bring equipment and luggage:

Interviewer "Do you think it is possible to come to the New Forest

without your car?"

'Bolderwood 9' "no I find that quite restricting yes I don't think there are

enough things that are direct to get me into the Forest.

Plus, it depends what you want to do as well."

'Bolderwood 9' "There are certain parts of the Forest you can get to like

Brockenhurst and places like that but then they are not like

this, so you have to weigh up what you want from that trip

to the Forest don't you really? And often if you are coming

for a picnic, you know with our weather it's helpful being

able to put a few things in the boot and it's a mixed bag of

whatever you might require really, extra drinks, are quite

heavy to carry."

'Bolderwood 9' identify how the car supports activities in less accessible destinations and provides a role in carrying larger amounts of equipment with these needs less readily provided for by rail.

7.3. Cycle Use

7.3.1. Cycle Infrastructure

NFNPA literature boasts of "100 miles of traffic-free forest tracks" (NFNPA, 2019), however these were observed not to provide for continuous links to popular destinations within the Park, with the need to undertake sections of routes on road in order to reach specific places.

"The detour to the Reptile Centre required us to cycle for 1km along the A35 which was busy with fast moving vehicles something that I would have avoided had I been with my daughter instead (then aged 11)."

Car driver behaviour impacted on the cycling experience:

"As we turned onto Ornamental Road a two-seater MG car with a young couple inside pulled out of the Bolderwood Car Park and then overtook us at speed accelerating noisily. This rattled my daughter who is not confident on the road."

(Bournemouth, February 2016 with daughter then aged 13)

"Cycling up towards the forest tracks I had a close pass as a Fiesta overtook a cyclist coming from the other direction at speed. The car gave the cyclist a very wide berth resulting in giving me very little space it was a bit frightening having an oncoming vehicle approaching that quickly."

(Burley YHA, August 2016)

Travelling on busier sections of road was particularly unpleasant for less experienced members of the group:

"Once I approached Beechen Lane I stopped and looked back to see that only my son was in sight. The others followed eventually looking unhappy and upset about having had to cycle along the stretch of road and not being able to keep up. Whilst one of my friends enjoyed cycling, she typically sought traffic-free routes taking her bike in the car. She never cycled anywhere directly from her home in Sheffield as she didn't like to go on the roads, she commented that "they should get rid of all of this" gesturing at the passing traffic.

(Shorefields Holiday Park, August 2015 - with my son and two adult friends)

The experience of cycling out of Lyndhurst on busy roads was in stark contrast to the morning's cycling on the forest tracks (see **Photos 4** and **5**). A study by Aldred (2015) identifies that regular cyclists have a greater tolerance for cycle routes incorporating busier roads but would generally prefer not to cycle with children where there is no physical barrier to traffic. The busy road scenario presented in Aldred's study was a two-lane road with no infrastructure and a 30mph speed limit. Outside of the built-up areas of the New Forest villages the speed limit was 40mph (60mph on the A35) and on exiting Lyndhurst, traffic moved in two lanes with speeds perceived to be higher as cars exited the congested area of the village. Cycling on roads with speeds limits above 30mph and when traffic is moving in lanes requires a higher level of cycling competence, training for these situations is introduced to children typically aged 11 and over and adults at level 3

Bikeability (Bikeability 2019). Aldred (2015) further identified that a traffic free shared route through a park was considered to be highly suitable for children and 'most people'.



Photo 4: Cycling on the forest tracks. Cycling through the ford provided a fun experience and a photo opportunity.



Photo 5: A337 From Lyndhurst towards Beechen Lane. The route back to the forest tracks from Lyndhurst presented a contrasting experience to time spent on the forest tracks

The researcher applied skills developed through professional and recreational experience of cycling to negotiate different on-road situations. However other members of the group did not share the same level of competence:

"On the return leg she was overtaken very closely by a car pulling a caravan as it passed her within the confines of a road narrowing. I noted how she wouldn't have known or maybe had the confidence to take up a primary position as she passed through the narrow section to prevent vehicles overtaking at this point."

(Sandy Balls Holiday Park, May 2015 with daughter, then aged 12)

Specific highway provision for cyclists was limited to a shared route along the A35 between Lyndhurst and Ashurst (**Photo 6**) which returned cyclists to the road at the periphery of Lyndhurst and a small, newly installed cycle bypass in Brockenhurst which was observed to provide very little practical advantage to cyclists (**Photos 7**).



Photo 6: Shared pedestrian and cycle route along the A35 between Lyndhurst and Ashurst.



Photo 7: Junction bypass at Brockenhurst.



Photo 8: Cycle Parking in the main village area at Brockenhurst. These two hoops were difficult to use due to the slope.

Notably, Lyndhurst 4 (2015) described how they had cycled along forest tracks where cycling wasn't permitted rather than using this more direct route along the A35 when cycling from their campsite in Ashurst to Lyndhurst.

Cycle parking was noted to be sub-standard in Brockenhurst (see **Photo 8**):

"The cycle parking spaces are on a slope so are difficult to use so I locked my bike to the sign post instead. Can you imagine providing sub-standard car parking? Also, only two spaces although there are some more hidden behind the wall in the Tesco car park."

(Burley YHA, October 2016)

Links between the forest tracks via Pinkney Lane and Beechen Lane included no provision and involved particularly challenging sections of fastmoving traffic in two-lanes with no footpath provision in some sections. High speeds and the absence of crossing facilities on A35 when cycling to Burley presented a significant barrier:

"We passed through Wootton and Brownhill Inclosures using the Forest tracks until we reached the A35 to the west. There are no crossing facilities on the A35 which is busy with traffic moving at higher speeds (the speed limit is unrestricted in this location permitting speeds of up to 60mph). We were waiting for some time until a vehicle slowed and held back the traffic flow allowing us to cross."

(Hoburne Bashley Holiday Park, August 2014)



Photo 9 – Crossing the A35

Cycling on the Forest tracks provided for a much more pleasant experience and was more compatible with the experiences sought when visiting the New Forest and more consistent with the experiences which were marketed by the NFNPA and cycle hire companies.

The visitor survey demonstrates how walking and cycling was reduced for visiting groups that included children. The researcher observed how the distance that could be covered and the destinations that could be accessed by cycle depended on the composition of the group. The researcher could cycle much greater distances when alone or with another regular cyclist and was more comfortable cycling on the roads. Conversely, the researcher limited or modified the level of cycle-use when children were with her and used her car to overcome these limitations:

"I decided that we should drive to Beaulieu as cycling would mean quite a long section on Hatchet Lane which I knew was not pleasant especially approaching Beaulieu."

(Roundhills Campsite, May 2016 with daughter, then aged 13)



Photo 10: **Hatchett Lane** (**B3054**) – Just outside of Beaulieu. To reach Beaulieu and nearby activities and attractions this section of road was unavoidable. The speed limit was 40mph.

"When my sister-in-law arrived with her younger cousin (aged 10) she hired a bike for her from the cycle hire centre on the site. For most of the time she was content to cycle around the holiday park with my daughter, but I was keen for her to experience cycling in the Forest and wanted to take them to the nearby Godshill Inclosure. I was uncertain of how she would manage to reach the Forest tracks given that it was a couple of miles requiring a long down-hill section on the road. In the end, we put two of the bikes in the car and I cycled down to meet them as it would have been a struggle to fit all three bikes in along with three passengers."

(Sandy Balls Holiday Park, May 2015)

In both of the above examples the car was used to overcome distance and infrastructure barriers. These barriers were greater for less experienced and younger cyclists whose presence in the visiting group presented a reduction in the availability of overall cycling competence.

7.3.2. Hire Bikes

Chapter 4 provides an overview of existing cycle hire facilities in the New Forest. Facilities in Brockenhurst have been developed using DfT Linking Communities Funding with the aspiration of providing a sustainable transport hub. There is limited academic research on the use of hired cycles in a leisure setting with existing literature focusing on shared bike schemes in urban locations, with schemes such as Transport for London's Santander Cycles readily providing for point to point journeys. The researcher observed how cycle hire facilities provided the opportunity to extend cycling experiences to members of the group who had not been able to bring a bike and also to undertake unplanned cycling activities to make the most of good weather while in the area. Trips using hire bikes were wholly leisure-focused, all took the form of circular trips which sought to maximise the proportion of the route which was on the forest tracks. How the bikes were used was defined by the need to return them to the point of origin within a fixed time-frame. Routes suggested by hire centres also framed the use of the bikes as an activity. For example, the route card bought from Burley Cycle Hire provided limited information beyond the route itself with navigation via numbered posts.

The cost of cycle hire positioned use as a full day's activity and the cost for family groups with older children using adult bikes was significant:

"Hire was expensive and I partly regretted not putting my mountain bike in the car so that I would only have to hire the one bike for my daughter. A bike was quickly found for me but it took a while to get a suitably sized bike for my daughter as an adult bike is still a little bit too big. As such I think we were at the hire centre for about 20 minutes, during which time people came and went."

(Bournemouth, February 2016)

The Family Cycling Centre at Brockenhurst, adjacent to the station did not readily provide for interchange with rail use and facilities remained firmly positioned as an activity with limited role for practical use.

"When I arrived at the hire centre, I asked if I could change somewhere and was surprised to be directed to the disabled toilet. I also needed somewhere to store my bag - they took this from me and placed it behind the counter. I would have preferred a locker as it had my laptop in it. On returning I asked if I could fill my water bottle before getting the train home and again I was directed to the tap in the disabled toilet which seemed to only have warm water."

7.3.3. Supporting Modes

The visitor survey demonstrates the role of the private car in transporting cycles to use in the area and the observations above highlight how cars continue to have a role for overcoming distance and infrastructure barriers. The researcher predominantly transported bikes to the New Forest in her car. Previous experience of transporting her bike on long distance Crosscountry trains to Bournemouth had shown this to be problematic as capacity for cycles was limited to three hanging spaces on the entire train, two of which could be booked.

Within the New Forest itself, cycling was interchanged with other modes. Movement around the area was supplemented by the NFT which represented a degree of novelty as this was the first time that the researcher had taken a bike on a bus (see **Photo 11**). However, limitations were subsequently identified by both the researcher and the driver with respect to the use of the space on the bus which would otherwise be used for pushchairs or wheelchairs:

"I boarded the NFT in Burley. The bus driver was very friendly but warned me that space for my bike may not always be available. Provision for the bike wasn't great, I was worried that it would fall as it was held up by a bungee cord."

(Burley YHA, August 2016)



Photo 11 Bike on NFT held in place by a bungee cord

The low frequency of the service meant that not being able to board with the bike would instead require a lengthy wait (if it wasn't the last bus of the day). At other times the researcher had observed the space in use by a disabled passenger and had noted the potential for conflict:

"There was a family already on board at Brockenhurst including woman in wheelchair in the area which would otherwise be used for cycles and I noted the potential consequences of trying to board with a bike should this area already be occupied."

(Hoburne Bashley, August 2014)

Local rail services also supplemented cycling journeys. Putting bikes on the train was initially undertaken with some trepidation with respect to the availability of space and the limited time frame to board. Following the first use it became clear that this was less problematic on South-western trains as there was typically more than one carriage where bikes could be boarded and not having to hang bikes meant that there was no requirement to un-attach luggage.

The researcher had felt reassured by the additional information and payment when transporting cycles on the Hythe Ferry from Southampton and the journey provided for a novel way of accessing the New Forest (see **Image 3** and **Photo 12**) although travelling by car would have provided a substantially cheaper alternative.



Image 3 Ferry Ticket

Clear pricing for passenger with cycle provided for reassurance that cycles would be readily accommodated

Travelling with bikes on the ferry was readily accepted and even seemed welcomed with the availability of a flat-bed truck on the pier train in Hythe.



Photo 12 – Hythe Pier Train. The train included a flat-bed truck which was used for the carriage of cycles.

Travel by rail requires an initial journey to access the station. Blainey et al (2012) identify station access as a as a barrier to rail travel. Within the context of overnight domestic travel this is confounded by the need to transport additional baggage or equipment. The accessibility of stations between locations is varied and the researcher's observations are limited to travel to and from stations in her home town, Southampton and Bournemouth alongside access to Lymington and Brockenhurst. The researcher cycled to Southampton city centre when accessing the Hythe Ferry and experienced discontinuous provision for cyclists:

"Cycling towards the City Centre and the Town Quay was lovely, had the feeling that I wasn't in England, lovely cycle route through the park and then along the side of the main road into the City Centre, lots of cyclists of all types. Until it came to an abrupt 'End of Route' and we had to cross the road and re-join the carriageway and then navigate our way using bus lanes and one-way streets. Up until the point of re-joining the carriageway the journey to Town Quay would have been feasible to undertake the journey with my daughter if she had been with us, but I know she would not have wanted to cycle in the bus lanes even though it was a quiet morning. As I was with my partner, an experienced and frequent cyclist we weren't phased although we were sometimes a little confused by the restricted turning movements which applied to all traffic but not buses, cyclists and taxis."

(Southampton, April 2016)

7.4. Flexibility and Complexity

Flexibility within leisure tourism travel decision making is context dependent and is conditioned by the availability of alternative options, existing knowledge and composition of the visiting group (Park and Fesenmaier 2014). Anable and Gatersleben (2005) identified the importance attributed to flexibility for leisure day trips with public transport performing poorly on this attribute compared to the car. Within a tourism context the car enables the temporal adjustment of plans to respond to opportunities as they emerge (Dickinson at al 2013). Within rural tourism, the weather is a significant precursor to evolving visiting plans with good weather exploited by spending time outdoors in the countryside or poor weather representing a temporary structural barrier to participation in an activity (Crawford et al 1991) with the need to access alternative experiences. For the researcher, the car allowed for changes in plans and more spontaneous activities:

"Monday: The weather had deteriorated, and it was very cloudy and windy. We didn't have any fixed plans, so we decided to pack up and get ready for the journey home. We visited the café at Lepe Country Park for a chance to see the sea before heading home."

(Roundhills Campsite, May 2016)

The researcher also made good use of sunny weather by diverting to the New Forest on the return leg of a journey from Bournemouth.

Interview groups described how their plans could change in response to the weather and how they were undecided with respect to their activities and potential stops after leaving the interview site:

'Bolderwood 7' "...so how long do you think you will stay in the area?

"a few hours, the weather will dictate that I think."

'Linford Bottom 2' "Probably last night we said lets go to the Forest, what

shall we do, look at the weather, and it seemed like it was

going to be okay so its sort of a free day out isn't it?"

'Lyndhurst 14' "We could be staying for longer though. We might do, we

booked for three nights - if the weather is good."

Conversely low frequency bus services coupled with limited timetabling information outside of village centres provided less opportunity to escape from adverse weather conditions:

"The weather was grey and drizzly which didn't help with the gloomy feeling. After lunch we walked along the disused railway track towards Holmsley and decided to get the New Forest Tour from Holmsley campsite. However, we became a little lost and it took some time to reach the bus stop near the campsite by which time it was pouring with rain and there was no shelter. We were unsure of whether we had missed the bus as the timetable didn't include times for this stop, so we started to walk along what we thought was the route of the bus in case it would subsequently come along."

(Shorefields, August 2015)

Spontaneity within visits was readily supported by car-use, especially when potential sites were geographically dispersed (e.g. a visit to the beach after visiting the

New Forest). Not having to make rigid plans added to the experience, providing an element of meaning within visiting practices:

'Lyndhurst 10'

"I don't know, what we going to do? Just keep driving probably, maybe Lymington, just driving around yes"

'Brockenhurst 1'

"We are taking a casual drive home we may stop for lunch, not lunch, dinner somewhere in the Forest as it takes us."

'Lyndhurst 3'

"We came literally straight here we have just been driving round the New Forest really...no we haven't got any plans

Escape from daily routines is a significant push factor of rural tourism (Kastenholz and Lima 2011) and visitor's unstructured use of cars within their visits supported this motivation. Interview groups positively framed their use of cars within the Park, the drive through the area representing part of the visiting experience. In this way car travel provided its own positive utility by enabling visitors to move through and experience the environment (Mokhtarian and Salomon 2001).

as such for the day we have just come to relax"

'Bolderwood 12' "So coming up Ornamental Drive in particular, that's quite a nice drive..."

Driving through the Park provided for opportunities to encounter animals:

'Bolderwood 14'

"...they drive through the Forest and there's horses and that and pigs in the road, they can't get their head round it they think its brilliant that you can just drive out and sit out somewhere like this"

'Bolderwood 15'

"I don't know I kind of like the drive. I kinda like bumping

Bolderwood 15' "I don't know I kind of like the drive, I kinda like bumping into horses (not literally bumping into them!)"

The researcher used her car to link wider trips to include New Forest sites as stopping-off points, en-route to and from other destinations and on the journey home, providing opportunities to visit relatives within geographical proximity to the New Forest but remote from home. Other studies have also identified how the desire to visit friends and relatives is an important factor in the decision to visit a rural region (Gitelson et al 1994). Friends and relatives in the area interact with the visit by joining visiting activities, providing accommodation and/or additional destination points. Park and Yoon's (2009) segmentation of rural tourism by motivation found a greater propensity for multi-

destination visits amongst those predominantly seeking 'family togetherness' and 'learning and social excitement'. Lue at al (1993) conceptualised multi-destination trips building on evidence from National Parks in the USA which demonstrated that a large proportion of visitors frequented more than one site or destination within a single trip and suggested that there are few instances where attractions exist as stand-alone destinations. The propensity for making multiple stops is evident within the visitor survey, although largely within the confines of the New Forest National Park and nearby beaches. The observations and the interview data identified numerous examples of spatial and temporal opportunism with rural tourism visits to the New Forest combined with other tourism destinations and other journey purposes highlighting the complexity of visitor's travel patterns. This complexity is largely formed around car use although the interview data did include one example of multi-destination rail use. Brockenhurst 3 (2015) were using a rail rover ticket to make excursions from their home. The rail rover ticket allowed for unlimited use of the network over a period of time and as such the couple could choose where they wished to stop.

Lue et al's (1993) conceptualisation provides a framework for classifying the form that visiting practices take with multi-destination trips supported by flexible transport provision providing for a greater number of accomplishments or motivations (elements of meaning) than single destination visits. The trips made by the researcher and those made by the interview groups provided examples of single destination, en route, base camp and regional tour trip patterns however few of these examples fitted neatly within each of these classifications.

7.4.1. Single destination

The single destination pattern implies that the visitor makes a trip from their home to the destination and returns directly home without visiting further attractions and as such is a pattern that can be most readily attributed to day visitors, although this may also represent a potential scenario for those staying within larger holiday camps where there are sufficient amenities on the site to meet all the visitor's needs during a stay, for example the Center Parcs experience (Jones 2002). These trips provide greater scope for bus and train journeys albeit dependent on the availability of services. Interviews and surveys were not undertaken at large attractions (e.g. Beaulieu Motor Museum) where this type of practice is more likely to prevail given the time and cost commitment required for these visits. The concept of 'single destination' is open to interpretation with the New Forest

National Park potentially representing the overall destination. Just seven of the interview groups described how they had arrived at the location directly from home without making any prior stops and intended to do the same on the return leg. Four of these interview groups comprised of more than one household who had converged at the New Forest site for lengthy picnics together. Whilst these journey patterns were not complex in terms of making multiple geographically dispersed stops, the remote destination, the composition of the group, high car occupancies and the incorporation of large amounts of equipment (as described above) made cars an essential material element of this rural visiting practice.

For other interview groups the interview site was the principal focus, but additional stops would be incorporated into the day. As with the visitor survey, these stops were often made to pubs and cafes on the way to or from the main destination. For many repeat visitors stopping off at a country pub or tearoom was synonymous with a visit to the New Forest with references made to loose plans for stopping off both by the Interview Groups and within the visitor survey. For other groups the New Forest was the destination with loose plans as to actual stopping points.

7.4.2. Stops made en-route and linked trips

The visitor survey identified that 4% of visitors in the sample had stopped at the New Forest site en-route between their home and their accommodation. Detailed examples of both staying and day visitors stopping off in the New Forest and other locations were yielded by the interviews. The researcher also observed how she extended the main purpose of her trips by making stops and detours. The examples fell into two main categories:

- 1. Detours and visits made to the New Forest prior to or following non-rural tourism activities
- 2. Detours and visits made to the New Forest which expanded upon an overall leisure visit to the area

For example, Lyndhurst 1 had stopped in the New Forest on the return leg of their journey to Southampton and had therefore linked their visit with a non-leisure trip:

Interviewer: "So you are on a day trip from home?"

Lyndhurst 1: "Well, kind of, we went to Southampton to pick up a part for a vehicle that's being fixed and it's kind of our way through, so we thought we would stop and get some food."

Lyndhurst 1 (2015) had linked their trip to the New Forest from their accommodation base in Bournemouth in order to attend a nearby local football match:

Lyndhurst 1 (2015) "We just want to end up in Bashley today, I'm going to watch football in Bashley"

The interview groups also included examples of where staying visitors had combined their visit with wider family commitments, for example, 'Brockenhurst 2' had first travelled to Corfe Castle in Dorset to drop off their daughter before arriving for a stay in Lymington and would return to Corfe Castle before going home:

'Brockenhurst 2':

"We have got three children and they are all away on various different holidays but one of them is down in Corfe Castle. So we wanted something that was local to there. But we didn't want to be Corfe Castle area we really like the New Forest."

For most interview groups who stopped off in the New Forest, these stops extended or formed part of their holiday plans. For example, 'Brockenhurst 1' were an elderly couple who were on the return leg of a short break in Bournemouth with their adult grandchildren. Their grandchildren had hired bikes while the couple relaxed in Brockenhurst. The decision to hire bikes may have been influenced in part by the sunny weather that day however the New Forest represented only a limited detour from the route between Bournemouth and their home in Surrey.

Interviewer:

"When you were thinking about going to Bournemouth, was it in your mind that you were going to go to the New Forest?"

'Brockenhurst 1':

"...well we thought maybe perhaps drive through it, I didn't know they wanted to stop and cycle, but I mean it's worked out well"

'Lyndhurst 12' had also stopped off for a break in the New Forest en-route to their holiday accommodation in the Isle of Wight. For this interview group the New Forest was a planned feature of their holiday with a visit to a museum on the return leg.

'Lyndhurst 12': "We are coming back through, on our way back through yes we are going to, erm what's that car place?"

Interviewer: "Beaulieu?"

'Lyndhurst 12': "yes on our way back we will stop in there, my Dad

recommended it didn't he so ... yes, we were going to do it a

couple of years ago, but we never had time."

Detours could also be made to other locations en-route to and from the New Forest, for example the researcher visited relatives in Andover on return home to the Midlands after a week's stay at Sandy Balls.

7.4.3. Trips made from a 'base-camp'

Lue et al (1993) identify how staying visitors make excursions from their accommodation or 'base-camp' to surrounding attractions. This is evident within the visitor survey sample with staying visitors drawn to the New Forest largely from accommodation bases in Bournemouth. The interviews provided for more detailed examples of how visitors were travelling to the New Forest for the day from accommodation within the surrounding areas. Trips made from a base-camp were facilitated by a greater range of modes. Two examples included visitors arriving at interview sites on the NFT both having accommodation bases from which they could readily access the Tour (Lymington and Hoburne Naish, the latter group accessing the Tour at New Milton).

As identified within the visitor survey, the interviews included a number of examples of visitors travelling on foot and by cycle from accommodation bases within the Park. For these visitors cycling not only provided a means to reach local destinations but formed part of the day's planned activities:

'Bolderwood 11' "We bought a cycle map and we brought our bikes with us so we cycled around a lot, we cycled over to Beaulieu one day."

'Lyndhurst 2' "We cycled into Lyndhurst first, went into the information centre and purchased the cycling map which gives us all the routes in the

New Forest...being in a motorhome we are selective where we go

to because you can't always park it, so we tend to have bikes or

walking."

'Brockenhurst 2' "We deliberately wanted to be in the New Forest and that was because we have got the freedom to be able to cycle and we wanted

to cycle and walk in the area...We have cycled every morning and we have walked every afternoon apart from, was it Tuesday that was really wet?"

'Lyndhurst 4 (2015)' "We use cycling as our main means of communication, although we did use the bus yesterday, we used the bus yesterday, we went to Bucklers Hard"

7.5. Negative Impacts and Dissonance

The researcher observed how traffic impacts detracted from her visits:

"Lyndhurst itself was very busy and we were keen to have lunch away from the traffic moving along the High Street, settling for a pub with a garden area to the rear."

(Shorefields, August 2015)

"Cars crawl into the village from both directions, the impact on air quality is readily perceptible. Pavements are narrow, cycleways are non-existent and vehicle speeds on exiting the town, once the bottleneck has been passed, are uncontrolled by highway features but instead supported by the two-lane gyratory – all this on the principle route to one of the key entry points into the Forest for walkers and cyclists, in a National Park where walking and cycling represent the main attraction"

(Burley Youth Hostel, August 2015)

(Taken from a note made by the researcher whilst waiting for the bus at a stop outside Lyndhurst)

"Crossing the road was actually made slightly easier by the presence of temporary traffic lights which provide a few moments where no cars passed through the main street."

(Observation in Burley, Bournemouth, February 2016)

"[My daughter] complained that she could still hear traffic noise despite being in the forest"

(Bournemouth, February 2016)

The visitor survey required visitors to rate the extent to which they had enjoyed their visit to the New Forest that day, 96% stated that their enjoyment was either 'high' or 'very high'. Prior to rating their visit 41% of the sample identified negative aspects of their visit when prompted. 70% of the negative comments related to the impact of traffic

and transport (see Table 25). Interview groups completed the visitor survey at the beginning of the interview. As such interviewees also identified negative aspects associated with transport but were found to offer an explanation or excuse for the impact:

'Lyndhurst 3' "No just got traffic coming down. Busy roads but that

happens everywhere, you can't help that can you?"

'Lyndhurst 6': "...only stress was the traffic which we can't do anything

about."

'Lyndhurst 8': "Oh, its August, it's like this everywhere...We are used to

travelling in traffic to get somewhere you know like the

coast, particularly in the summer."

'Bolderwood 13': "... obviously the traffic is terrible but we have added to it

today so but that's it."

There was an inevitability to the visitor's experience of traffic congestion and 'Bolderwood 13' acknowledge their role in contributing to the problem. The review of transport availability in the New Forest and the findings of the visitor survey identify that for the majority of visitors alternatives to car use are limited in terms of availability, practicality and cost.

'Lyndhurst 15' were a father and his nine-year-old son visiting from Japan. The boy's response was more blatant but nevertheless interjected with apologetic comments from the father:

Interviewer: "Are there any things you don't like about the New

Forest?"

'Lyndhurst 15': "Not particularly no...

'Lyndhurst 15(son)': "Noisy cars"

'Lyndhurst 15' "Yeah cars are not too bad here, they were a bit busy

yesterday but it was a Sunday so we expect it."

'Lyndhurst 15(son)': "Horrible air, sometimes."

'Lyndhurst 15': "Horrible air?"

'Lyndhurst 15 (son)': "Sometimes, the cars, the gas!"

The impacts of traffic are incompatible with the key pull factors of rural tourism which centre around environmental assets such as fresh air, greenery and tranquillity (Park and Yoon 2009). Visitors to the New Forest experience the negative effects of traffic when accessing the area and also whilst in busy villages with high volumes of through traffic, however for many, their activities will take them into the forest on the traffic free forest tracks where traffic can be readily forgotten for much of the duration of their visit. Visitors are able to use their cars to overcome gaps in the network of these tracks and therefore also avoiding direct exposure to noise, poor air quality and perceived and real dangers whilst at the same time contributing to these impacts. The compulsion to excuse or brush aside the impacts could also be explained by drawing on the idea of tourism as a performance (Edensor 2000) acknowledging that traffic had any significant effect would suggest a less than utopian experience in which visitors had invested their time and money. The example above shows how the child is more readily prepared to be honest about their experiences. Dickinson and Robbins (2008) found that experiences of congestion in the rural coastal destination of Purbeck in Dorset were typically accepted by visitors as part of the experience of visiting during the peak season. The Purbeck study demonstrated how representation of traffic problems are constructed from personal experience alongside wider ideas such as tourism expectations and motivations. Dickinson et al (2009, p118) conclude that "people draw on well established representations to justify their position and this effectively reinforces the current situation where the car is viewed as essential by many for leisure and tourism trips". From a social practices perspective, the negative impacts of traffic do not readily contribute to elements of meaning and are therefore shown to be veneered by visitors. The impacts do however contribute to the form that the visit takes with the development of strategies which reduce exposure.

7.6. Summary

The interview and observational findings have enabled the identification of significant elements of visiting practices attributable to transport use and provides further understanding of the limitations of bus and rail use compared within the backdrop of the extensive materiality of the car and how car use supports greater flexibility and range within visiting practices compared to other modes. Provision for cycle use is shown to be less comprehensive with deficiencies requiring increased levels of competencies which are available to a reduced number of visitors. **Table 38** provides a summary of the transport related elements of rural tourism visiting practices alongside the potential 'carriers' (Reckwitz 2002) of the practices which incorporate these elements. To be a carrier it is shown to be necessary to have access to the required materials (for instance

through ownership, or proximity) and have the necessary competences to enable the use of the resource. This includes being able to rationalise the use of the material transport elements in respect of the availability of personal vehicles and comparative costs accounting for economically linked group members and aspirations or meanings of the visit. Potential carriers of car based visiting practices extend to all those with direct and associated access to a car. Rail and Bus are essentially available to all but with the backdrop of car ownership and the predominance of visiting practices that car use supports compared with the limitations of other modes (e.g. reduced geographical range and more limited cargo function) the number of carriers who incorporate these modes into their visiting practices is limited.

 Table 38
 Transport related elements of visiting practices in the New Forest

Movement and Access by car					
Materials	Meanings	Competences	Carriers		
Road	Convenience/flexibility	Driving skills	Households with		
infrastructure			direct car access		
Continuous	Negative impact of	Familiarity/knowledge	(77% of UK		
provision	visitors (noise, road	of road network and	households) plus		
between home to	danger, air quality)	optimum routes	associated users		
destination	36121 1 2 2	75 d . 1 d . 1 d	(friends and family of		
XX7' 1 1	Multiple destinations	Relationship with car	car owners)		
Widespread access across the	and purposes	owner/associated			
destination area	Freedom to move	access to car use			
destination area	through the area	Ability to reconcile the			
Free car parking	tinough the area	negative effects of			
at destination	Existing commitment	congestion			
	to personal vehicle use	- congestion			
Vehicles	r				
(Privately owned					
cars and					
campervans)					
Existing resource					
- transport costs					
of visit partially	Spending time with				
met in advance	others				
Passenger travel					
No additional cost					
for passengers	Supporting activities				
	with greater material				
Shelter/protection	requirements –				
from the weather	continued use of				
	existing equipment				
Cargo carrying	(e.g. own mountain				
(cycles, camping	bikes)				
equipment etc.)					
Access by rail					

Rail network and		Direct/immediate	Visitors able to
stations (not door		access limited – need	achieve access to
to door)		to use other modes	origin station
Station access: Public transport Routes Cycle Routes		Availability, suitability and cost of additional modes	Visitors able to achieve visiting aspirations by rail
Station parking (parking charges			Car-free households
at origin station)			Railcard holders – committed rail users
Routes from destination station to desired locations in the Park and other associated destinations – use of other modes Reduced cargo capacity	Reduced geographical range of visit – narrow scope Visit adjusted to reflect reduced materiality or materials obtained on arrival (e.g. hire bikes)	Availability, suitability and cost of additional modes — ability to reconcile the cost Ability to reconcile the cost compared to other modes	Economically independent visitors paying individually Car-free households Visiting alone
Pay full cost for each journey			
Railcards - Fare reductions for certain groups			
Pay for each group member			
Movement and Acc	ress hy hus		
	Break from driving	Ability to access bus	Visitor able to
door to door)	Break from cirving	route from home/accommodation	achieve access to bus
Routes from	Limited geographical		
destination bus	range on arrival		Car-free households
stop to desired	without additional		Economically
locations in the	modes		independent visitors
Park and other			
associated	Part of the visiting		Bus pass holders
destinations – use of other modes	experience, an activity		
Reduced cargo capacity – no cycle carriage on standard buses			
Pay full cost for each journey			
Fare reductions/free			

			1
travel for certain			
groups – older			
people with bus			
passes			
Tour Bus and			
local buses			
providing access			
across the			
destination			
Access on foot and	by cycle		
Footpaths cycle	Part of the day's	Able to overcome	Visitors living in
tracks, roads	activities	distance and route	proximity to the Park
		barriers	Visitors with
			accommodation in
			the immediate area
Movement by cycle			
Road			
infrastructure	Experiencing the Park	L2 Bikeability skills	Older children and
Quiet roads			adults
	Providing access and	L3 Bikeability skills	More
Busier roads	connectivity –		experienced/confident
	Incompatible with		cyclists
	rural tourism		
	aspirations		
Forest tracks	Experiencing the	L1 Bikeability skills	Visitors able to reach
Gravel surface	Forest	Availability of suitable	tracks with bikes
Off-road cycle		bike for gravel surface	
routes			
Bikes brought	Flexibility, greater	Ability to transport	Visitors with car
from home	range, sunk cost of	bikes to the area (by	access or with the
	cycle ownership,	car or by rail)	above competencies
	cycles refined for		to access by rail
	users needs		
Hire cycles	An activity, defined	Ability to afford cost	Visitors able to
	by hire terms (cost	of hire	reconcile the costs
	and time)	Availability – ability to	(by framing as a
		access limited resource	stand-alone activity)

8. DISCUSSION AND CONCLUSIONS

Introduction

This chapter discusses the findings in the context of the original research objectives:

- 1. To identify existing rural tourism travel practices
- 2. To analyse how practices may vary according to visitor characteristics
- 3. To develop a transferable framework for appraising sustainable transport provision in rural tourism destinations
- 4. To analyse where transport initiatives can be implemented more effectively to increase sustainability

It then sets out how the research has contributed to the development of new knowledge before identifying areas where further research would enhance understanding within the field of tourism and leisure transport use.

8.1. Identifying Transport Use within Rural Tourism Visiting Practices

This research sought to identify how transport is used within rural tourism visiting practices using the context of the New Forest National Park. The literature review identified how overlap exists between the activities of leisure and tourism visitors and analysis of existing datasets demonstrated how shorter and more frequent visits made to the New Forest by the immediate population had become entwined with those which were more consistent with the definition for tourism visits. Local, more frequent visitors were also evident within the visitor survey and formed part of the overall understanding of visitor modal shares. Their continued presence within the visitor survey emphasises the significance of this visitor group, however the visitor survey allows for the closer scrutiny of these responses during analysis through the identification of the frequency of visit and proximity of origin, this research therefore contributes to the methodological approach to dichotomizing these groups. Local leisure visiting practices were beyond the scope of this research which instead focuses on tourism visits consistent with the UNWTO definition (UNWTO 2016). The omission of this group with respect to transport use and relative sustainability is reflected on below in the context of areas for further research.

The transport use of the three overarching forms of tourism visits identified within existing datasets have been examined: visits made to and from home over the course of the same day, visits made by those staying in accommodation outside of the Park area

and visits made by those staying within the Park area. Overall rural tourism visiting practices are varied and not defined by these visiting groups. Staying visitors, staying excursionists and day visitors are shown to partake in similar activities when visiting and it was the objective of this research to identify how transport interacts with these practices rather than an examination of the entire visiting practice. These three groups can be observed within other rural tourism contexts with proportions of each group determined by the geographical context of the destination area. For day visitors and visitors travelling from accommodation bases elsewhere, these patterns of visitation reflect the extent to which travel time is an important factor in destination choice within a tourism day visit (Rossi at al 2015). Staying visitors invest more time in travelling to accommodation and are prepared to undertake additional travel for excursions when staying for longer periods of time and, similar to day visitors, are subject to the laws of distance decay (Lew and McKercher 2006). The focus of the staying visitor is therefore centred around their accommodation base from which they may choose to invest their holiday time travelling to other destinations with respect to their available time budget and the push and pull factors (Dan 1981) of their base and surrounding attractions. These spatial and temporal characteristics therefore establish the fundamental boundaries for how transport is used. Transport is shown to contribute to visiting practices by providing for initial access and enabling movement around the destination area during the visit and the research sought to identify the material, meaning and competence elements that transport use affords rural tourism visiting practices.

8.1.1. Transport for Access

This research reinforces the findings of previous studies undertaken in other UK rural tourism settings. These identify some of the limitations of public transport for providing access (Dickinson and Robbins 2007; Guiver et al 2007; Downward and Lumsdon 2004) and expands our understanding of how public transport users are defined by their group composition, age and geographical origin with urban centres offering the greatest accessibility potential for public transport use supported by reduced levels of car ownership. Use of public transport is further limited by reduced accessibility at the destination. Most visits to the New Forest were facilitated by cars which faced fewer constraints on movement. The predominance of car use for access is found to be underpinned by structural factors, most significantly the extensive network of provision for the use of private vehicles coupled with economic advantages resulting from a

widespread existing commitment to car ownership and use. This is further bolstered by the ready transferability of car-use competences within a domestic tourism context within which visitors have high levels of familiarity. Further material elements of the activities most readily associated with rural tourism (e.g. camping, cycling, picnicking) were found to necessitate car use. The planned activities of the visit are linked with transport use for access in terms of the specific rural tourism activities that it supports which have codeveloped with car use to incorporate greater materiality and dependence. Car use has opened areas of the New Forest to visitation which would have otherwise been left largely unexploited, expanding the breadth of accessible locations to the point where viable fixed public transport routes cannot readily be provided and visits made by car are not easily replicated by other modes. This includes the development of campsites and holiday parks which are both remote from train stations and scheduled bus services, as such cars not only facilitate access to accommodation but also prevent the visitor from being effectively stranded during their stay.

Transport for access is a necessary material element of rural tourism visiting practices. Vehicles, supporting transport infrastructure and economic structures are therefore material elements of practices alongside the required elements of competence to make use of these materials. Transport use in all contexts is found to contribute meanings beyond the functionality of getting from A to B. When using transport to access tourism experiences, elements of meaning are drawn from travelling with friends and family alongside the anticipation of pleasant experiences (the 'Halo effect') (Anable and Gatersleben 2005). The less rigid timetable compared to more every day journey purposes (Ho and Mulley 2013) reduces the distinction between access and activities on arrival at the final destination with journeys incorporating stop-offs on route with car users most able to achieve these complex travel patterns. This form of multi-destination domestic tourism has evolved from the availability of personal transport with touring being a significant feature of tourist car use (Connell and Page 2008). These elements cannot exist in isolation, material elements of transport make visitation possible by providing for access when the associated competencies are present. Car transport materiality is shown to enhance elements of meaning by providing support for a greater range of activities and purposes whilst more readily supporting group travel.

8.1.2. Transport use within the Rural Destination Area

Visitors derive intrinsic benefits from their transport use within a rural destination area (Guiver and Stanford 2014, Lumsdon and McGrath 2016). This research shows how all modes of transport can contribute to the visiting practice by providing the means to enjoy the environment. Their movement through the area can be without a destination, for instance, taking a circular journey around a forest track or it can contribute to achieving other objectives (e.g. shopping, visiting a café or attraction). Cars facilitated access for most day visitors and those visiting the New Forest as part of an excursion from accommodation bases elsewhere. For these visitors, their subsequent use of other modes (walking, cycling and the NFT) is positioned more as a leisure activity than practical transport use. Visitors staying in the New Forest could more readily move around the area on foot and by cycle without the support of their cars and therefore used these modes to support their daily activities.

8.2. How does transport use within visiting practices vary according to visitor characteristics?

How transport is used for staying visitor access at the beginning of a stay is shown to vary according to accommodation type and location. Transport use to facilitate day visits either from home or from accommodation bases elsewhere are further determined by the origin and destination points of the visit alongside the requirement for transport to support their planned activities. Therefore, transport use is initially determined by the visitor's locational characteristics the visitor survey provided for clarification of this aspect with respect to staying visitors who use transport from both their home and their accommodation. The visitor survey identifies how further variation exists as a result of the presence of children within a visiting group and the observations show how varying competences of individual group members can influence mode choice. The composition of the visiting group is demonstrated to further determine the economic rationality of travelling by coach, bus or rail especially within a wider backdrop of car ownership.

How transport is used within rural tourism visiting practices is therefore dependent on the spatial and temporal characteristics of the visitor's origins and their destination, how transport supports their planned activities and who they share their visit with. These dependent factors interact, for instance a visitor's origins may provide the optimum opportunity for accessing the area by non-car modes in terms of distance and/or availability of public transport alternatives but their planned activities may require

significant amounts of equipment or additional stops or the composition of their visiting group may render these alternatives economically unviable or present reduced overall levels of competence to achieve access by active modes. As a result, some visiting groups have more favourable features which allow for travel by non-car modes.

8.2.1. Group Composition

This research demonstrates the significance of the visiting group's composition on how transport is used. The life-stages of the individual group members influence the available competences to utilise transport within its existing physical and structural arrangements to achieve their visiting aspirations. Competence is interpreted as the availability of the required skill, knowledge or qualification or capacity. Capacity is interpreted here as including the physical or economic capacity to perform a practice. This follows Giddens premise that knowledge is practical and provides for "the generalized capacity to respond to and influence an intermediate range of social circumstances" (1984, p21). The composition of the visiting group affects the availability of elements of competence to use different transport modes. Furthermore, elements of meaning or motivation/desires may vary within a visiting group with more heterogenous needs within larger and more age-diverse groups.

A greater propensity for less car use within rural tourism practices amongst child-free visiting groups is supported by structural factors. Some of these factors are not directly related to transport provision, for example, catered accommodation provides for a greater proportion of the domestic short-stay market (Visit Britain 2017). Shorter stays in hotels, guest houses and B&Bs are likely to have a smaller spatial focus and time budget which reduces transport needs during the stay whilst also having a greater likelihood of being situated in more built-up areas where greater public transport accessibility exists. The greater homogeneity of adult-only groups provides for similar motivations and competences within the group which may act to further reduce the need to seek wider experiences and therefore reduce transport needs during a visit. For family groups the reverse is true, with a preference for self-catering accommodation and the requirement for more luggage and equipment and a greater diversity of needs most readily met with the flexibility provided by the car.

In the New Forest the economic and physical attributes of existing transport provision make car use advantageous for both adult-only and family groups, however adult-only groups have greater capacity (competence) to use other modes for access and movement. Adult-only group members may not be economically tied to other members within their group and can reconcile the costs of public transport use compared to car use, coupled with greater availability of discounted travel in the form of Young and Senior Persons railcards and for older visitors the provision of free bus travel. Railcards are available for families, but their use is unlikely to compensate where there is an existing commitment to car ownership this is confounded by this group being insufficiently committed to rail travel to justify the purchase of railcards to secure discounted travel. An increasing proportion of young people are delaying car ownership (Chatterjee et al 2018) making public transport also a choice for longer trips with the lowest levels of car ownership observed in London. Starting a family also marks the onset of greater car ownership (Clark et al 2016) within more everyday contexts this life stage is linked with greater car dependency, particularly for women, resulting from the development of more complex travel needs and more constrained time budgets (Dobbs 2005). The findings show how cars play a role in helping to overcome distance and route barriers to cycling with children who are least likely to have high levels of on road cycling competence exacerbated by the reluctance of parents to expose their children to traffic danger. Furthermore, when cycling represents a significant focus of the visit, visitors actively seek to avoid unpleasant experiences which would present elements of meaning which are essentially incompatible with rural tourism visiting practices.

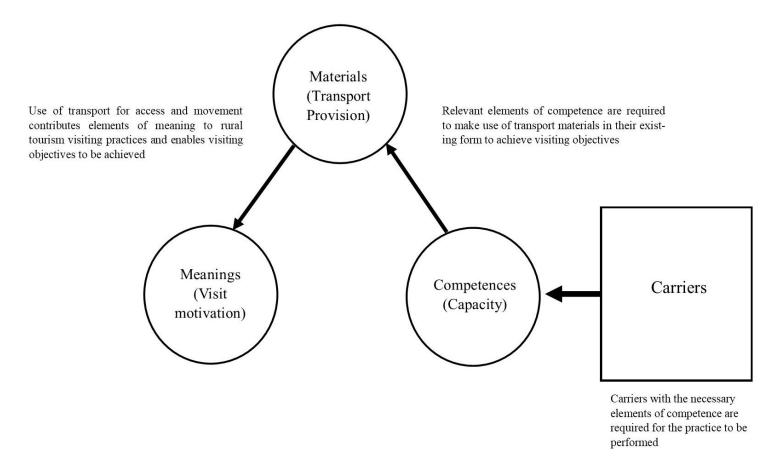
8.3. Developing a Framework for the Appraisal of Visitor Transport Provision

8.3.1. Conceptualisation of Transport Use within Visiting Practices

Transport use can be described as existing on a continuum with transport for access only at one extreme and transport purely for recreation at the other, the latter presenting itself more centrally within the overall rural tourism visiting practice. Elements of meaning associated with experiencing the environment are more significant within recreational transport. While car use contributes to negative experiences for visitors, these same experiences are also avoided by travelling by car, whereas walking and cycling offer the greatest opportunities for connection with the natural environment. Transport provision (its physical infrastructure and pricing structures) represent largely fixed material elements of rural tourism visiting practices. Material elements are essential

for the continued performance of visiting practices in that they facilitate access and provide a means to move around and experience the destination area. Elements of meaning depend on where and how material elements of transport are used by the visitor within visiting practices and therefore shift with context. Visitors must have the required elements of competence to make use of transport's material elements. The availability of elements of competence varies within the visitor population and for different modes. Both elements of meanings and materials determine which competences are needed. Competencies account for the 'where' and the 'who' of the visitor's capacity to make use of transport and therefore determines the availability of carriers. 'Where' referring to the spatial characteristics of visitors and their relative accessibility, 'who' being the relative capacity of the whole visiting group to make use the available transport. Meanings include the underlying motivations for the visit ('what'), elements of competence allow the use of material elements to achieve these motivations. Material elements can affect the form of elements of meaning either detracting or adding to the visiting experience. **Figure 4** summarises this conceptualisation.

Figure 4 Conceptualisation of Transport Use within Rural Tourism Visiting Practices



This research has provided an understanding of existing transport use in the New Forest National Park, conceptualised using the 3-elements model (Shove et al 2012). It identifies the extensive materiality of car use and how this impacts on the capacity of visitors to use other modes of travel and how elements of meaning are both influenced by the context and its use to achieve visitor's aspirations. Therefore, it is necessary to rearrange the elements of practice to achieve desired changes with the understanding that the removal of necessary elements (e.g. visiting objectives) could limit or end the take up of the practice as will the inclusion of incompatible elements (e.g. traffic congestion). Within visiting practices, elements of competence and meaning attributable to transport use are shown to be dependent on the arrangement of material elements, therefore an approach which rearranges elements of competence and meaning without also addressing materiality is likely to deliver limited change.

8.3.2. Establishing the 'Where', 'Who' and 'What' of Transport Use

The social practices framing recognises the complexity of transport use within rural tourism visiting practices, as such appraisal must draw upon an understanding of the constituent elements. The visitor survey provided a practical tool for establishing the 'where', 'who' and 'what' of transport use in this context, reinforced by the objective knowledge of the material elements achieved through desktop research and observation. These initial steps should form the basis of transport appraisal. The visitor survey identifies the spatial characteristics of visitors, accounting for the variation in access opportunities. It identifies the composition of the visiting group thereby providing the means to analyse the variation in available competences and their impact on how transport is used. This is placed within the context of the visitor's activities, including where these involve multiple stops, linking their use of transport with their visiting aspirations or meanings. The visitor survey and the framework offered by the above conceptualisation is transferable to other rural destination areas providing an opportunity to understand how transport use sits within visiting practices with different spatial characteristics. For example, the greater rurality of Northumberland District National Park or the increased proximity to urban centres of the Peak District National Park.

8.4. Identifying Opportunities to Increase Sustainability

8.4.1. Sustainability Priorities in Rural Tourism Destination Areas

National Parks and AONBs have a legislative requirement to support access for the public's enjoyment, but not to the detriment of conservation. This requirement infers the need to reduce transport related carbon emissions with respect to the long-term impacts of climate change on species and landscape. Reductions in noise, local air pollution and visual intrusion should also be sought as these impact on both conservation objectives and the public's enjoyment of these areas. With respect to these aims, the reduction of the volume and frequency of car movements to and within National Parks and AONBs therefore represents the priority for developing more sustainable transport use and therefore desired visiting practices are those which incorporate less overall car use.

A similar proportion of visitors access the New Forest National Park by car as the background levels of car ownership in the UK and in this context the elements of competence required to use other modes for access are framed within this wider structural backdrop of transport provision. The need to reconcile the use of public transport given the reduced economic benefits for car owners coupled with more limited flexibility and scope of visits represents the most significant challenge for the transfer of car-based access trips to other modes. Studies have demonstrated the effects of dissonance when making sustainable mode choices (Barr and Prillwitz 2012) with just a small proportion of the population identified as being prepared to 'do the right thing', these studies barely acknowledge the structural backdrop within which mode choices are made, notably, Anable's (2005, p73) "Car-less Crusaders" were least likely to have children living with them at home and whilst the "Committed Green Travellers" segment of Barr and Prillwitz's (2012, p805) study were able to make use of sustainable modes for everyday travel, holiday trips still incorporated air travel in similar proportions to less environmentally conscious segments within the study. Similarly, the potential to bring about modal shift for access journeys within rural tourism visiting practices by focusing primarily on behavioural change is limited.

Transport for movement within the New Forest lends itself to the use of non-car modes for a broader base of carriers. This includes visitors with car access, as the meaning shifts to place connection and enjoyment of the surroundings more centrally within the practice. The Park authority has limited scope to address the wider structural

features of transport provision for access journeys, however it is evident that visitors have a propensity to use more sustainable transport modes during the course of their visit as such efforts should be focused on reducing car use within the Park.

8.4.2. Reducing car use within the Park

A map of the elements of practice relating to existing transport use for movement within the New Forest National Park is shown as Figure 5. The material elements of all transport modes are set out both in respect of the propensity for visitors to undertake multi-modal travel and how transport use for one mode can affect the available competences to use another. When transport is used within the Park it contributes elements of meaning to visiting practices by allowing travel between destinations and attractions and providing a means to experience the environment. Dashed arrows have been used to show where material elements in their current form make a limited contribution to these elements of meaning. For example, with its existing system of provision, hire bikes contribute less to providing access but do enable the visitor to experience the New Forest. The elements of competence required to make use of these material elements in their existing form are shown alongside the key attributes of carriers who possess these competences. The map identifies material elements where changes to their configuration would to contribute to the overall objective of reducing car use for movement around the Park. These elements represent those areas which present scope for action by the local planning and highway authorities with changes to rail infrastructure and the existing model of car ownership requiring action from Government. Enhanced bus service provision is subject to funding and the viability of services is linked to wider transport ownership models with this study demonstrating how bus use serves niche groups within the population reflecting this wider transport policy backdrop.

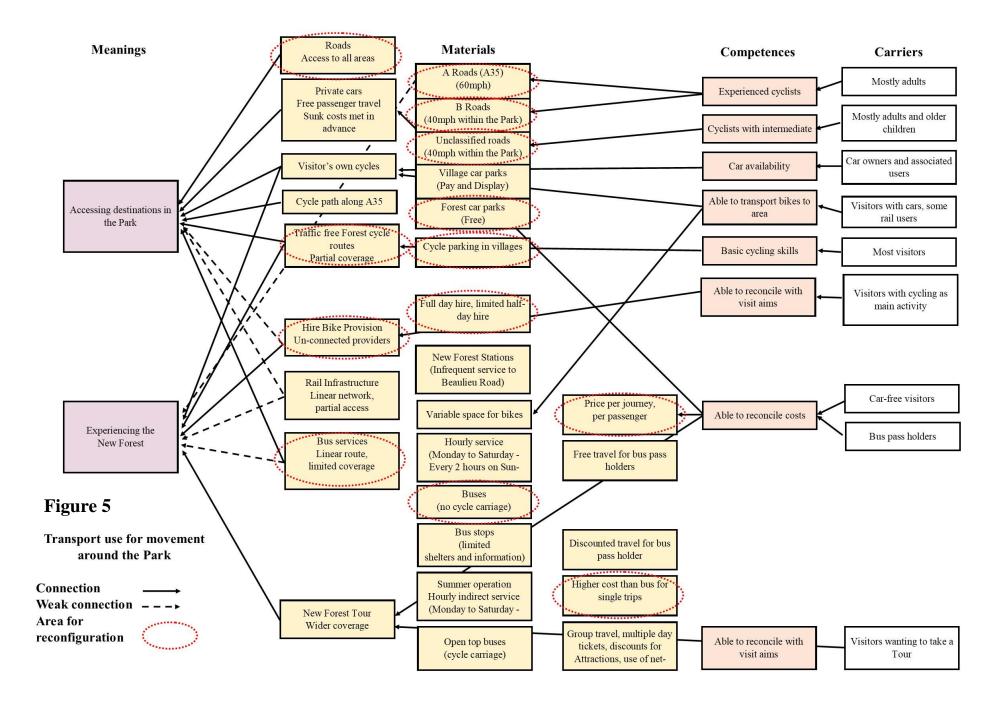
Some initiatives will affect greater change than others and overlap between material elements and their effects on the required competences means that changing multiple elements will further contribute to achieving the objective. Bristow and Steiner (2000) identify road closures and rationing of road space as the measures with the greatest potential to reduce car use and nuisance. Calls to limit vehicle movement are far from new, the 1945 Dower Report recommended that there would be a need to restrain traffic growth within the then proposed National Parks if the negative impacts on landscape and tranquillity were to be avoided (Cullinane 1997). Cullinane's review, now over two decades old, identified a continued failure to act on the recommendations of the Dower

Report, a failure which is still evident today. This appraisal framework reinforces the need for traffic management measures to achieve a reduction in car use. Reducing the extensive materiality of car use within the Park in terms of the overall reach and comparative economic advantages will extend the availability of competences within the visiting population to use non-car modes. Restraining traffic movement represents a fundamental measure for addressing the imbalance of modes. This research demonstrates how some visitors to the New Forest make use of non-car modes to move around the area despite having cars at their disposal. Providing a wider area which is car-free is wholly consistent with the overarching motivations for rural tourism and by reducing the existing spatial reach of private vehicles within the Park will reduce the advantages of car use whilst addressing the negative localised effects of traffic on the visiting experience and the environment.

Restrictions to vehicular movement would facilitate more connected safe and pleasant cycle routes extending cycling experiences to a wider visitor base. Such restrictions would also provide opportunities for public transport modes to present advantages over car use, increasing the capacity of car owners to reconcile the disparity in costs. Taking a network approach would avoid delivering isolated traffic-free segments which currently act to generate further car trips. Some unclassified roads within the New Forest would readily lend themselves to vehicular access restrictions with alternative routes available for motorised modes (e.g. Ornamental Drive and Inchmery Lane, Holmsley Passage). A 'quiet lanes' (DfT 2004) approach could be adopted across other parts of the road network within the Park with measures to reduce traffic speeds and volume thereby extending the connectivity of leisure routes across the area.

The resulting core areas of low or no car use would need to be supported by a reshaping of car parking provision, recognising that existing public transport networks do not provide access from all visitor origins and therefore accepting that cars will continue to facilitate access and with respect to the more limited scope of the Park authority to address the effects of car ownership on modal choice for access. Developing parking provision which is dedicated to mode transfer on the periphery of the car free area would contain the impacts of car use. The existing absence of parking fees currently reduces the capacity for car owners to reconcile the use of other modes when accessing the New Forest. Car parking charges also provide a means to recoup the costs associated with providing and maintaining car parks and are implemented at Forestry Commission sites in other locations in the UK. Studies have identified that visitors are more receptive to

parking fees where these are clearly hypothecated for management of visitor impacts (Phillip and MacMillan 2006). It is therefore also recommended that car parking charges are implemented to both financially support the development of initiatives to facilitate more sustainable transport and to address the comparatively higher per visitor costs incurred by public transport users. Therefore, whilst reducing access within the Park for private vehicles primarily acts to reduce the use of cars for movement within the area, the potential exists to also achieve some modal shift for access journeys.



8.4.3. Increasing Cycle Use within the Park

Cycling on more trafficked routes provides for little or no contribution to the enjoyment of the experience and the use of hire bikes within their existing system of provision (pricing, fixed hire periods, positioning as an activity) makes a limited contribution to the elements of meaning associated with access and connectivity to support wider visiting practices (e.g. visiting an attraction). In contrast, visitors use of their own bikes contributes to both elements of meaning. Most visiting groups have the required elements of competence to cycle on the forest tracks but when cycle routes include interaction with 40mph traffic the number of available carriers with the required competences is reduced.

Visitors using their own bikes must be able to transport them into the area. Visitors accessing the Park by bus are unable to transport cycles from home and therefore cannot extend their spatial reach within the Park beyond that which is achievable on foot. This would in part be remedied by allowing the carriage of cycles on the service routing through the Park. Visitors arriving by train can transport bikes from home and indeed cycling could also facilitate station access. Provision of space for bikes is however variable. Hire bikes provide a potential solution but the existing system of hire provision limits the scope of combining use with any other significant activities. The NFNPA sought to address this aspect of cycle use with the proposed cycle docking stations providing for short term hire opportunities. However, as reported within Chapter 4, this scheme was deemed unviable and subsequently abandoned. Providing hire services for shorter periods would help to address the limited/varied capacity of rail services for the carriage of bikes and extend the range of visitors accessing the area by public transport. This may be achievable by extending co-operation between existing hire providers to allow for linear drop off points and the extension of provision to encompass larger visitor attractions. The commercial nature of these facilities means an additional funding source is necessary to subsidise these changes which could be provided through the hypothecation of parking charges.

8.4.4. Integrating public transport costs into the visit

The integration of public transport costs into the accommodation charges for visitors staying in the Park either through a voluntary purchase or a compulsory additional

charge at the time of booking would provide for a comparable approach to car use with journeys effectively paid for in advance. The effect would be supported and enhanced by restrictions on car access and the wider introduction of parking charges. The provision of pre-paid unlimited bus travel has been shown to increase bus use (Bamberg et al 2003) and examples in tourism settings include the Konus-Card in Germany's Black Forest (Schwarzwald 2019) and the Pearl Mobility Card (Alpine Pearls 2019).

8.4.5. Summary

Table 39 provides a summary of the material elements of practice identified for reconfiguration on **Figure 5** alongside details of the recommended changes.

 Table 39
 Summary of recommendations

Material Element	Recommended	Impact on	Impact on
	Change	Competences	Meanings
A Roads within the	Targeted speed	Supporting a greater	Increased scope of
Park	reductions and	range of cycling	access for cyclists
	crossing facilities to	competences	
	accommodate visitor		
	cycling desire lines		
B Roads within the	Targeted speed	Supporting a greater	Increased scope of
Park	reductions from	range of cycling	access for cyclists
	40mph to 20mph to	competences	
	accommodate visitor		
	cycling desire lines		
Unclassified roads	Identify routes for	Supporting a greater	Increased scope of
	reallocation of	range of cycling	access for cyclists
	priority for travel on	competences	Increased network
	foot, cycle and	Increased capacity	for experiencing the
	horseback, restricted	for car owners to use	New Forest by non-
	vehicular access.	non-car modes	car modes
Forest car parks	Implement parking	Increased capacity to	Supporting the
	charges	use non-car modes,	development of an
	Develop multi-modal	balancing of costs	increased network
	interchanges at		for experiencing the
	peripheral car parks		New Forest by non-
			car modes
Forest tracks	Provide for	Increased capacity to	Supporting the
	continuous quiet and	use non-car modes	development of an
	traffic free routes to		increased network
	accommodate visitor		for experiencing the
	desire lines		New Forest by non-
*** 111			car modes
Hire bike provision	Develop shorter term	Increased capacity to	Use of hire bikes
	hire models in	use non-car modes,	extended to
	collaboration with	connectivity with	incorporate use for
	hire providers and	public transport	access
	visitor attractions		

Cycle carriage on buses	Allow bikes on the Forest Bus	Increased capacity to use public transport	
Extending bus coverage	Reconfiguration of services to extend coverage. Demand responsive services, changes to NFT	Increased capacity to use non-car modes, connectivity with other public transport	Supporting the development of an increased network for experiencing and accessing destinations in the New Forest
Public transport ticketing	Advance charge staying visitors to include use of public transport during the stay	Increased capacity to use non-car modes, connectivity with public transport	Supporting the development of an increased network for experiencing and accessing destinations in the New Forest

8.5. Contribution to knowledge

8.5.1. Contribution to Theory

Giddens and Ajzen both describe the need to consider an individual's capacity to carry out an action. For Ajzen, actions need to be under volitional control before the Theory of Planned Behaviour can be applied (Ajzen 1985). His summary of non-volitional factors which exert a strong influence on the ability to perform the behaviour in question presents significant overlap with the findings of this research; being able to make use of sustainable transport in the New Forest is demonstrated to be subject to 'time and opportunity' and the needs, skills and abilities of the whole visiting group. For Ajzen a behaviour is only likely to take place if it is deemed possible and these non-volitional factors need to be first eliminated before shifting the focus to the role of attitudes and subjective norms. There is therefore a need to identify the scope for these potentially absent behaviours, an area of interest which is excluded from theories grounded in the Theory of Planned Behaviour but has been satisfied in this research through the employment of Social Practice Theory.

For Giddens (1984) competence is required for the production and reproduction of practices and the agency to perform a practice is dependent on its presence in the required form. This research has exposed how competence is set within the context of materials revealing how it incorporates the requirement to negotiate with wider structures which also may act to reduce the rationality and therefore agency of certain actions. The effects

of these wider structures on mode choice are evident within transport research in a general sense, however within this research their effects are drawn together to be applied to a specific scenario. This research has developed Shove's 3-Elements Model (Shove 2012) to provide an explanation of how within the context of transport use, elements of practice relate to each other with a directional flow with the incorporation of carriers of practices into the model. This flow of requirements is needed for a practice to take place. This is 'practice as performance' rather than 'practice as entity' for in an applied setting we are tasked with understanding the degree to which the preferred practice is achievable. In this form the model can begin the process of quantifying the availability of carriers to identify the nature and scale of change that is required to achieve desired outcomes and therefore it also represents a preliminary step to be taken before the consideration of the role of attitudes and subjective norms. To date, applications of Social Practice Theory within transport studies have identified elements of practice but have given limited consideration of how they are related and have not taken the next step of providing an approach for understanding scale. This new, evolved 3-elements model provides for a more comprehensive approach than, for example, transport accessibility studies which consider capacity in only a very practical sense (e.g. availability of step-free access and services) and enables the role of meaning to be accounted for. Whilst capacity is required to use material elements in their existing form, if this form does not allow for the achievement of objectives or meanings then there is no reason for the practice to take place. In summary, this development of the 3-elements model provides a new conceptual tool which can be used to both understand the complexity of transport use and the extent to which desired transport outcomes are feasible within a given setting. This tool has provided an insightful and nuanced understanding of how transport is used for rural tourism in the New Forest but has the potential to be applied in other settings for a wider remit of practices where transport is an integral feature. This research has therefore responded to the call to explore the potential of sociological perspectives in addressing the challenges of climate change and sustainability and concludes that the framework represents a key stage which precedes analysis focusing on affective attributes of transport use.

8.5.2. Methodological Contribution

Adopting a social practices framework, specifically the 3-elements model required the identification of elements relating to the practices in question alongside an understanding of how these elements interact and the associated characteristics of the This approach has necessitated the development of a new supporting carriers. methodology which draws on both quantitative and qualitative methods. In particular, the design of the visitor survey overcomes the prevailing issues associated with identifying how transport is used in the face of multi-modal travel and often complex trip patterns whilst capturing where transport use is a group endeavour. It also addresses the ambiguity that exists with respect to different visitor origins and provides clarity on where transport is used primarily for access and where it predominantly represents an activity at the destination. The visitor survey has provided new evidence on the variability that exists in mode choice and where this is attributable to group composition, visitor origins and visitor destinations. Analysis of the results has revealed where and for who the capacity to incorporate sustainable transport into visiting practices is more limited. Finally, the visitor survey provides a format which can be readily applied to other rural tourism settings.

8.6. Areas for further research

8.6.1. Application of the 3-elements model within other transport contexts

This research demonstrates the value of applying a social practices theoretical framework to a transport sustainability problem. The approach allows the extent to which the use of a preferred mode of travel represents a realistic choice with respect to the availability of the required capacity within the population or group in question to make use of transport materials in the existing arrangements to achieve their objectives. In this way it provides for a preliminary filter before the consideration of the role of affective factors such as attitudes and habits. Applying such a filter should represent the first step in determining the appropriate measures required to address a transport sustainability problem. Other transport contexts present opportunities for further research. For example, initiatives to address the increasing use of the car for the journey to school have centred around soft intervention factors and whilst their limited success is attributed in part to parents concerns over safety, alongside the need to link their journey to school with other journey purposes (Atkins 2010), no attempt is undertaken to understand and

quantify the extent to which this limits the capacity of parents to use more sustainable modes and therefore the value and scope of measures is not known. Cairns and Jones (2016, p43) set out how evaluation of soft measures is problematic with respect to the background effects of the "specific combination of geography, socio-economic demographics and transport options", reiterating how transport choice is highly context dependent, as such, further application of the approach developed within this research offers significant potential to overcome this complex issue although it is likely to continue to require specific settings or case studies prior to the development of more generalised conclusions.

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Appendix A

Appraisal of Pilot Survey

New Forest Visitor Survey 2015 – Pilot Survey

1.0 Background

1.1 Pilot Survey Aims

A pilot of the New Forest Visitor survey was undertaken during the May half term break (week commencing 25th May 2015) with the aim of testing the proposed approach to questioning prior to its use over the summer period.

The pilot survey was undertaken at four of the five survey sites identified for the Visitor Survey and is therefore also able to provide some feedback with regards to advantages and disadvantages of the selected locations.

1.2 Ethical Review

For the purposes of the pilot survey only, as the full survey is to be undertaken independently, an ethical review was undertaken by the Ethics Committee at Bournemouth University. The process of the review identified the need to provide respondents written information on the purposes of the survey alongside contact details for further enquiry. The review also required that respondents should be able to withdraw their results up to an identified date and that reporting protected individual identities with care taken in mapping of any postcode data.

1.3 Survey Times, Dates and Locations

Table 1.1 provides a summary of the times and locations of the pilot survey alongside the number of respondents.

 Table 1.1
 Summary of survey locations

Date/Time	Location	Number of
		respondents
25/05/15 (Bank Holiday	Bolderwood	10
Monday) /1500-1700	Near to the deer observation platform	
26/05/15 (Tuesday)/1500-	Burley Village Centre	10
1700	Benches adjacent to the Burley Inn and	
	benches within The Mall and adjacent	
	to seating near public toilets	
27/05/15 (Wednesday)/1500-	Brockenhurst Village Centre (Brookley	10
1600	Road). Area of benches opposite	
	Tesco Express and adjacent to the ford	
	(both sides of the road)	
28/05/15 (Thursday)/1500-	Keyhaven, benches adjacent to harbour	10
1700	wall along the northern side of the	
	harbour and at the gate to the Solent	
	Way	

The sites chosen for conducting interviews within the four survey locations were selected with consideration as to the availability and frequency of passers-by, with the additional requirement for the site to be 'transport neutral', therefore not in a car park, not adjacent to a

bus stop or rail station etc. The actual sites chosen tended to be close to benches or areas where visitors lingered e.g. near the deer observation platform at Bolderwood.

It was considered useful to move the survey between two locations so that visitors did not become too aware that a survey was being conducted and therefore avoid the area (or purposely take part) this assisted in providing for more potential respondents and increased randomness.

In summary, the selected sites provided for a steady flow of visitors allowing for the targeted ten surveys to be collected relatively quickly. Brockenhurst and Burley represented the busiest locations whilst visitors to Keyhaven were more dispersed. The survey took no more than five minutes (and was even shorter for visitors from home) however many respondents were particularly keen to chat for longer.

1.4 Review of Questions

Table 1.2 below provides an overview of issues identified with the survey questions within the pilot, alongside suggested changes. Full details of the pilot survey questions are attached as **Appendix A**.

It should be noted that the pilot survey was conducted using paper copies. It is intended that the final survey is conducted digitally to allow the use of question logic.

 Table 1.2
 Review of questions within pilot survey

Question Summary	Issues/Comments	Suggested amendments
Question 1	No issues, was readily understood and answered with	Consideration may need to be given to
'Please tell us about who you are	ease. It helped that the respondent was able to see the	simplifying the options for analysis.
visiting with today'	question and select accordingly.	
	Two respondents selected two categories (family +	
	friends)	
Question 2	The requirement to get the genders of the group	Consider removing gender.
'Can you provide some details about	members alongside their ages seemed intrusive and	
your group'	unnecessary from the onset so was scrapped at the	Amend the question to specify that the details
	beginning.	are for the group they are with at that location,
	There were no problems with the number of each age	not those left behind or gone elsewhere.
	category being requested.	
	Often the survey was conducted with a group rather	
	than an individual and the identification of all of the	
	ages of the group members acted as an ice breaker.	
	Sometimes a respondent may be on holiday as part of	
	a group but not all of the group have travelled to the	
	survey location.	
Question 3	No issues with this question. The 2004/05 work noted	
'How many dogs have you got with	whether dogs were on a lead, this could be noted here	
you?'	although the dog may not be present at the survey	
	being with another member of the group and the	
	locations of the surveys were places where a lead	
Overtion 4	would generally be in use.	Consider deies two company have
Question 4	No issues with the wording. Where people were	Consider doing two surveys here – perhaps
'Are you on a day visit from home or	staying with friends/relatives members of the group	using the question logic to make this easier.
are you visiting as part of your holiday/stay with friends or	tended to fall into two categories as the visitors who	Only a small number of respondents likely to
holiday/stay with friends or relatives?	were SFR were often accompanied by the actual friends/relatives who were therefore 'on a day visit from	require this (in the pilot was two out of 40)
TGIALIVES!	home'	
Question 4a	No issues in collecting this information. There tends to	Predictive text should help with taking this
Where is your holiday	be a limited number of locations stated. However	information down more quickly.
accommodation/friends or relatives	where the location is more unusual the interviewer	
accommodation/menus or relatives	whole the location is more unusual the interviewer	interviewer may need to seek clanty if

home?	should seek clarification.	respondent states accommodation that is vague – e.g. Hobourne – which one Naish or Bashley?
Question 4b 'How did you get to your holiday accommodation/friends or relatives home at the beginning of your stay?	No issues in understanding this question.	May wish to change the order of modes so that most common are at the top.
Question 4c 'What sort of accommodation are you staying in?'	No issues, but would flow better if this question followed Q4a	Suggest inserting before Q4b
Question 4d 'How many nights are you staying away from home?'	No issues but would flow better if question on mode came last in this section	Suggest inserting before Q4b but after Q4c
Question 5a 'Mode of travel and activity at current location'	For easier analysis this question needs to be broken into more sections.	
(i) 'How did you get to 'Brockenhurst'?	Perhaps alter order of modes so most common is at the top although this may be less of an issue with the digital version. This would be the more appropriate point to ask whether they are using own bikes or hire bikes if they have cycled to location. Larger groups are likely to have arrived in more than one car. Need to add this is in.	Add in additional choice of rented bikes/own bikes here Add in option of more than one car for the group
(ii) What did you do here/what do you plan to do while you are here?	Some people passing through as part of a walk or cycle ride therefore this needs to be an option. Shopping also could be more specific. Many people just browsing whilst a few may have called for food shopping. 'Having an ice cream' was identified by a large number perhaps combined with 'passing through'. Also visiting museum/castle should be an option. Crabbing, horse riding etc.	Review the categories with consideration to splitting shopping and adding 'passing through' and 'museum/castle'. Also special events such as the Superworm trail. Some activities may be exclusive to that location, e.g. crabbing or ferry.
	The time categories were appropriate and the question was well understood. However it wasn't always clear	Consider being more specific. Difficulties arise when in Keyhaven and Bolderwood as people are more likely to be passing through as part of their activity.

(iii) How long do you plan to plan to stay in the <i>Brockenhurst</i> area?	what 'this area' meant. If for example you were in Bolderwood, visiting the Knightwood Oak may also be considered to be in this area. May be better to ask 'in this location' instead as previous activities are covered. There is a blur between passing through and recreational walking/cycling etc. Question is readily answered but may need some more clarification as to where 'here' is. Maybe re-word.	Time categories may be difficult to analyse as they are within a range. Consider identifying the start and finish time, although recognised that it will still represent an estimate. Not all of the other locations are within the New Forest therefore needs the surveyor to tick a box to confirm this.
(iv) Have you come directly from your home or accommodation to get here today?	As the survey is in the afternoon there may have been morning activities and then a return to the accommodation before setting out again – can this information be readily collected?	Consider rewording/rephrasing perhaps 'where did you start your journey to Brockenhurst?' with the option of home/accommodation or manually entered origin. Or 'what did you do before arriving in Brockenhurst?'
Question 5b 'Activities before arriving at the location' (i) 'How did you get to X?' (ii) 'What did you do there?'	No problems with mode. Review the options, need to include passing through and parking the car in respect of those who parked elsewhere to facilitate a walk or bike ride which included a visit to the survey location.	Review this question in the context of Q5a(iv) and with consideration of whether more information can be collected about the day so far rather than just the previous location as the survey is in the afternoon there is potentially more information on what people did in the AM. Include 'parking the car'
Question 5c 'Where do you plan to go next?'	May consider asking 'what do you plan to do next?' instead as the respondent may be returning to the accommodation for a brief period before setting off again. The questioning suggests that they return to the accommodation and that's it for the day.	Review in respect of this – may want to allow for another activity. Centre the mode around the activity rather than the other way round. E.g. 'what do you plan to do next?' 'go back to campsite' 'will you go anywhere else later' 'yes, we will go for a meal in Lyndhurst' 'How will you get there?'

Question 5d 'What is your final destination today?'	There is a need for more clarity here as sometimes holiday accommodation can be described as home, albeit temporary.	What we want to know is if people who are on holiday are heading home that day and may have passed through the Park en-route. May therefore need to change the wording of the question to 'are you returning home today or going back to your accommodation?' Or relocate the question to the beginning when asked about number of nights away as this would save asking visitors from home this question.
Question 6a 'What aspects make the New Forest special compared to other destinations you have visited?'	This question often elicited numerous answers sometimes with other members of the group participating, including the children. It made for a positive interview experience. The interviewer may have trouble noting everything down, so possible record only the first three answers.	Maybe instruct the interviewer to record only the first three answers (but not to request three answers or reveal that only recording three). Nvivo can be used to analyse these answers.
Question 6b 'How would you rate your overall level of enjoyment of you visit to the New Forest today?'	No issues – but response likely to be affected by the weather	Weather conditions need to be noted for each survey day – taken from same source e.g. the Met Office website screen shot of hour by hour forecast for the location.
Question 7 'Home postcode/home country is overseas visitor'	No issues	Take down postcode carefully
Question 8 The New Forest National Park Authority have an ongoing programme of researchWould you be happy for us to contact you to further assist with this?	The style of this question is not consistent with the rest of the survey as it is too wordy.	Make this question more succinct if possible

1.5 Repeat Visitation

A number of day visitors from home questioned during the pilot survey referred to the proximity of the Park to their home as being part of what makes it special to them (question 6a). Some elaborated on how often they visited and one visitor even suggested that this should form part of the survey. In respect of understanding the potential impact and the travel behaviour of visitors, particularly those visiting from origins close to the New Forest, the frequency of visits is significant and as such should be included within the 2015 visitor survey.

The 2004/05 Visitor survey provided the following options to ascertain the extent of repeat visitation:

Visit at least once daily (all year round)

Visit at least twice a week

Visit at least once a week

Visit at least once a fortnight

Visit at least once a month

Less than 12 visits in the last twelve months

Less than six visits in the last twelve months

Only visited once or twice in the last twelve months

Not visited in the last twelve months

The extent of repeat visitation features in the 2014 Visitor Survey as follows:

Have you been to this area (the New Forest National Park) before?

If yes, when was your last visit?

Within the last week

Within the last month

Within the last six months

Within the last twelve months

More than a year ago

The 2004/05 approach to this question seeks to identify more routine visits with respect to its coverage of a wider area of the New Forest, including more peripheral sites. The 2014 survey asks the visitor in relation to the whole of the New Forest National Park.

The following potential benefits are identified in further understanding patterns of repeat visitation: transport impact with respect to visitor type; familiarity with the area; potential for modal change. As such a more detailed understanding such as that within the 2004/05 survey would be preferable and it is suggested that an additional question is designed with reference to this but with consideration of the potential to provide comparable results with later surveys.

Care should be taken to ascertain the sort of sites visited. Previous surveys have demonstrated that visitors often incorrectly identify locations as being within the New Forest National Park. Therefore it may be necessary to cross check by asking for examples of places they have visited.

Separation is required for the questioning of holiday and day visitors. Holidaying visitors may own, or have friends and relatives who own holiday accommodation in the Park or nearby or they may just choose to have regular holidays in the area. However it isn't appropriate to ask them if they visit on a weekly basis. Question logic should allow a separate route to be developed.

1.6 Things that may have spoiled a visit to the New Forest

The 2004/05 TSE study asked visitors whether anything had spoiled the enjoyment of their visit that day. 79% reported that 'nothing' had spoiled their visit that day. The use of 'spoiled' would suggest that the visit was ruined a particular aspect rather than identifying any negative aspects which may have been of concern to visitors. The previous question in the visitor survey asked visitors what they 'particularly liked' as such a reverse of this may help to identify areas where improvements could be sought.

It is suggested that an additional question is added allowing visitors to comment on any aspects of their visit they didn't like or was of concern.

2.0 Initial Results from Pilot Survey

2.1 Introduction

The main purpose of the pilot survey was to test the approach to questioning and the survey locations. The above review has identified where changes are required to increase clarity and the effectiveness of the survey.

The pilot survey provided the opportunity for the researcher to speak to 40 groups of visitors during the half term break. The results of the surveys have been entered into a database primarily for the purposes of developing an appropriate format for the data. However by undertaking some initial analysis of the data the effectiveness of the questions can be considered in more detail whilst providing some initial feedback to the NFNPA. At this stage, given the small sample size, more in-depth analysis for instance by survey location or visitor type has not been undertaken.

2.2 Group Composition

All of the respondents to the pilot survey were visiting either with a partner, with family or with friends of with both family and friends. In total the activities and transport characteristics of 142 individual group members were collected. 23 of the 40 groups had children with

them, 11 of which had children with them who were aged five and under. The majority of visitors were in family groups. **Table 2.1** provides a summary of group composition.

 Table 2.1
 Summary of group composition

	Number	% of total
Visiting alone	0	0%
Visiting with a partner	11	27.5%
Visiting with family	27	67.5%
Visiting with friends	2	5%
(Visiting with family and friends)	2	
Visiting as part of an organised group	0	0%
Total	40	100%
Groups without children	17	42%
Groups with children	23	58%
Groups with children under 5	11	28%
Average group size	3	3.6
Groups with dogs	5	12.5%

2.3 Visitor Type

Eleven (27.5%) of the groups were on a day visit from home, 27 (67.5%) were visiting while on holiday, two groups (5%) were staying with friends and relatives. Within the staying visitors (on holiday and those staying with friends and relatives), 15 (52%%) of the groups were staying within the New Forest Boundary and 14 (48%) were staying outside of the Park's boundary.

2.4 Modal Shares

All groups visiting the New Forest during their holiday or stay with friends or relatives, initially travelled to their holiday accommodation by car or campervan. Modal shares of all visitor groups to the survey locations are detailed in **Table 2.2.**

 Table 2.2
 Summary of modal shares for groups surveyed

	Bolderwood	Burley	Brockenhurst	Keyhaven	All survey sites	
	number	number	number	number	number	%
Train	0	0	1	0	1	3%
Bus	0	0	0	0	0	0%
Car/Van	9	8	1	5	23	58%
Campervan	0	1	0	0	1	3%
Bicycle	1	1	5	2	9	23%
On Foot	0	0	3	3	6	15%
Total	10	10	10	10	40	100%

Of the 15 groups arriving at the survey site on foot or by cycle, seven travelled to their previous stop by car and as such had an initial journey leg within the New Forest by car.

Table 2.3 shows the modal shares for all the individuals within the surveyed groups.

 Table 2.3
 Summary of modal shares of all individuals

	Bolderwood	Burley	Brockenhurst	Keyhaven	All survey sites	
	number	number	number	number	number	%
Train	0	0	2	0	2	1%
Bus	0	0	0	0	0	0%
Car/Van	40	26	6	11	83	58%
Campervan	0	4	0	0	4	3%
Bicycle	2	4	14	9	29	20%
On Foot	0	0	10	14	24	17%
	42	34	32	34	142	100%

Average car occupancy is 2.08 although single groups arriving in more than one car was not recorded in the pilot survey as such the occupancy is likely to be less when accounting for the larger family groups.

2.5 Length of Stay

Table 2.4 provides a summary of the length of stay at the survey sites.

 Table 2.4
 Summary of visitor length of stay at survey sites

	Bolderwood	Burley	Brockenhurst	Keyhaven	All surv	ey sites
	Number of groups	Number of groups	Number of groups	Number of groups	Number of groups	% of all groups at all sites
Less than 30						
minutes	2	1	0	1	4	10%
Between 30						
minutes and one						
hour	2	0	3	0	5	13%
One to two hours	4	4	4	2	14	35%
Two to three						
hours	2	2	1	5	10	25%
More than three						
hours	0	3	2	2	7	18%
Total	10	10	10	10	40	100%

The overall length of stay in the New Forest including the visit to the previous site and the next planned activity has been estimated based upon the middle value of the range within the questioning. Based upon this approach, the average time spent visiting sites in the New Forest for all visitors (exclusive of time spent at accommodation which may also be in the New Forest park boundary), was 2 hours and 37 minutes. For day visitors the average time spent was 1 hour and 56 minutes and for staying visitors 2 hours and 52 minutes.

2.6 Visitor Activities

Table 2.5 provides a summary of the activities identified at the survey sites. Note that respondents could select more than one activity. Recreational walking, watching wildlife and cycling were the most frequently cited activities. However it should be noted that 'watching wildlife' was most frequently cited at Bolderwood where the survey location was adjacent to the deer viewing platform.

Of the eight groups citing cycling as an activity, three were using bikes they had hired and four were using their own bikes. The type of bike was not identified for one group at this stage in the survey.

 Table 2.5
 Summary of visitor activities at the survey location

	Bolderwood	Burley	Brockenhurst	Keyhaven	All sur	vey sites
	number	number	number	number	number	% of all groups citing this activity
Recreational walking	3	2	5	6	16	40%
Exercising dogs	0	1	0	0	1	3%
Jogging/running	0	0	0	0	0	0%
Relaxing/picnicking	2	2	1	0	5	13%
Watching Wildlife	8	0	1	1	10	25%
Cycling (mainly off-road)	1	3	2	2	8	20%
Cycling (mainly on-road)	0	0	0	0	0	0%
Visiting café, Pub, tearoom	0	3	3	0	6	15%
Shopping	0	1	4	0	5	13%
other	2	6	3	3	14	35%
Specify:	stopping by, Superworm Trail	ice cream (5), stop- off(1) horse- riding (1)	ice cream, look around, horse riding	Bird watching, visiting castle and ferry, crab fishing	N/A	
Total	16	18	19	12	65	

2.7 Special Qualities of the New Forest National Park

The scenery, landscape and natural beauty of the New Forest National Park was most frequently identified as a special quality of the New Forest National Park with the second most frequent being horses, ponies, foals and donkeys followed by wildlife and animals. Other emerging themes include the Park's proximity to home, nice walks and cycling routes.

2.8 Visitor Ratings

4 (11%) respondents rated their visit to the New Forest that day as 'average'; 8 (21%) as 'high' and 26 (68%) as 'very high'. All of those rating their visit as 'average' were on a day visit from home.

2.9 Willingness to provide postcodes and personal contact details

38 out of the 40 respondents provided their home postcodes all of which were valid and could be plotted on a map. Two respondents declined to provide this information.

25 of the respondents were willing to provide their contact details (telephone, address and email) for the purposes of further research. 11 refused and the remaining four were unsure about telephone details but were possibly prepared to provide an email address. No actual contact details were taken, the question was instead used to test willingness to provide.

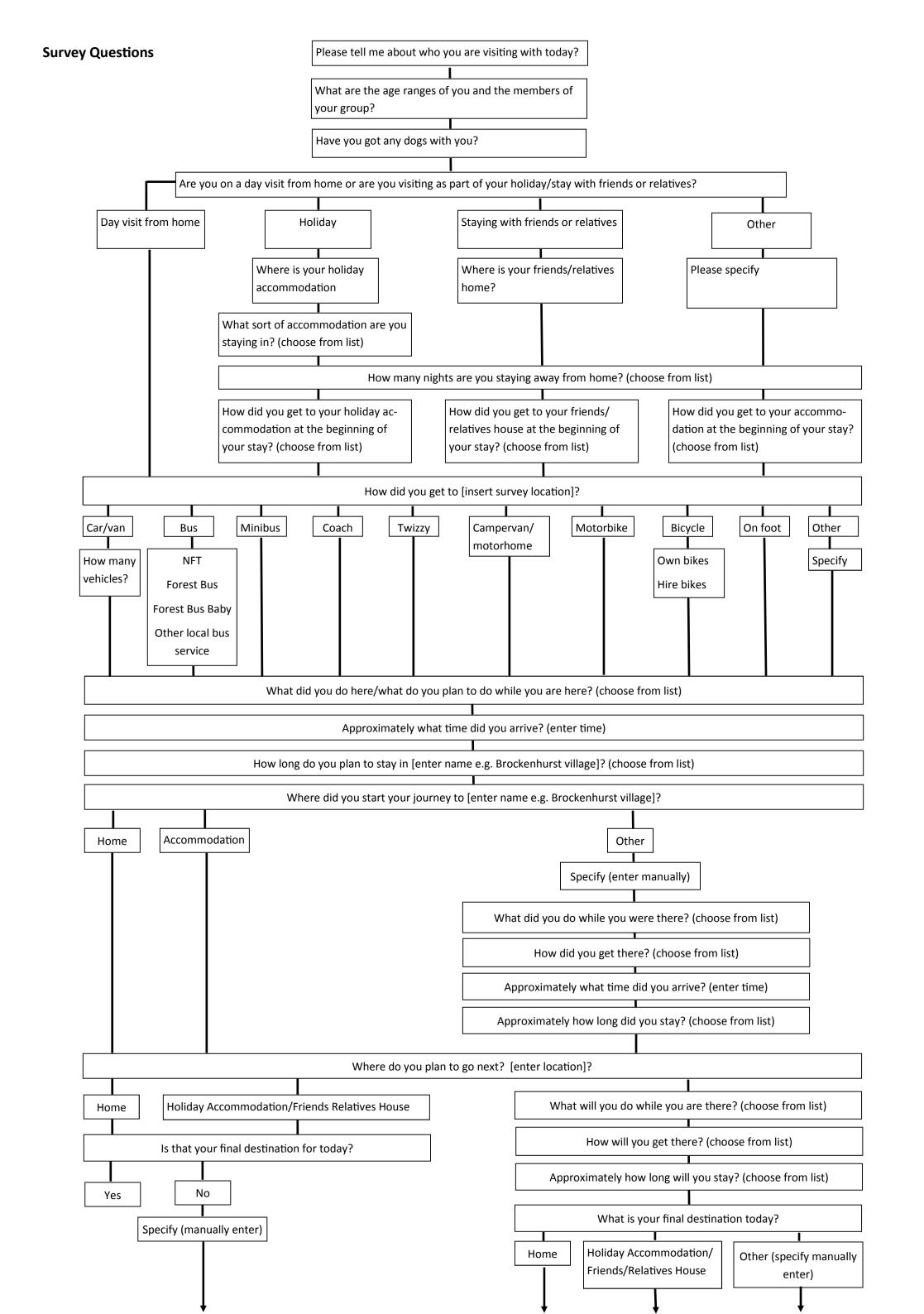
3.0 Summary

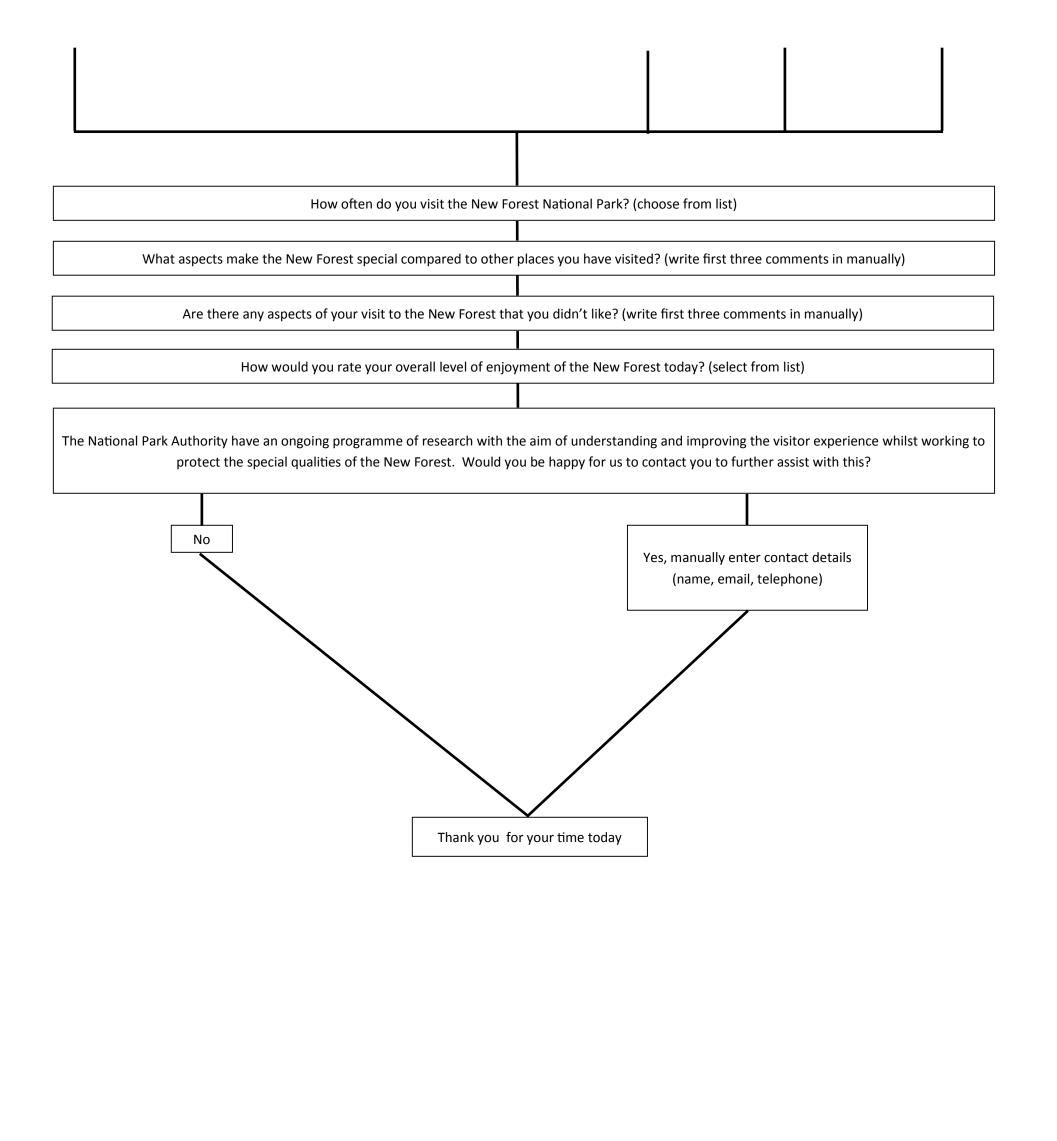
The full survey is to be undertaken during the summer months of July, August and the beginning of September. It is anticipated that this will yield a minimum of 600 responses and therefore allow for detailed analysis of the transport characteristics of visitors to the New Forest with the potential for a range of cross-tabulations to enable consideration of different visitor types. It is beyond the scope of the pilot survey to undertake this level of analysis however a review of the survey data collected has provided the opportunity to refine the approach to questioning and to plan for the formatting of the data.

A refined approach to questioning has been developed as a flow-chart, and is attached as **Appendix A**.

Appendix B

Visitor Survey Flow Chart





Appendix C

Visitor Survey Format

)1	Date: (use format e.g. 01/07/15)		Q3	Location:	Lyndhurst Village	Burley Village
Q 2	Interviewer Initials:				Bolderwood Car Park	Keyhaven
					Brockenhurst	Fritham
					Village	Lepe
	New Forest N	lational	Park	c - Visit	tor Researc	h
of u Jua	New Forest National Park Auderstanding and improving the lities of the Park. Please can yoldack is really important to us	he visitor ex ou spare a f	perie	nce whilst	working to prote	ct the special
)4	Who are you visiting with today? (tick all that apply)	_	Q9	(Please se	of accommodation a lect the accommodat art of your stay only).	
	alone		i			
	with partner					_
	with family			•	nouse	<u> </u>
Q 5	with friends Can you provide some details about			· ·	house, cottage or flat	_
	age range? (please enter a number			campervan.		
	category including yourself)			touring cara	van	·····
	under 5			camping (ter	nt)	
	6 to 10			youth hostel	·	L
	11 to 15			otherif other please	specify	
	16 to 24					
	25 to 34					
	35 to 44		Q10	beginning	ou get to your accom of your stay? (Pleas	e select the mode
	45 to 54			of transpo journey on	rt used for the longe lly).	st part of your
	55 to 64			car or van		
	65+			train		
16	How many dogs do you have with	ou?	7		/coach	
7	What kind of trip are you on today				scooter/moped	
Q 7		12 overleaf		•	motorhome	
	holiday	0.000				_
	friends or relatives			-		
	other					_
	if other please specify		if	other please s		
8	Where is your accommodation local	ted?	O11	How many	nights are you stayi	na?

L

Q12	How did you get to this location today? (Please select the mode of transport used for the		Q15	Approximately what time did you arrive? (use format e.g. 12:30)		
	longest part of your journey only).		Q16	How long do you plan to stay?		
	car or van	Ħ		less than 30 minutes	. 🔲	
	train	· -		30 minutes - 1 hour		
	bus: New Forest Tour	·		1 - 2 hours		
	bus: Forest Bus	.∐		2 - 3 hours		
	bus: Forest Bus Baby	.∐		3+ hours		
	bus: local bus service		Q17			
	minibus	.∐		arrived here?		
	coach	.∐		came from home skip to Q22 over	leaf	
	Twizzy/electric vehicle	. 🔲		came from holiday accommodation or friends		
	campervan/motorhome			and relatives houseskip to Q22 over	leaf	
	motorbike			came from somewhere else		
	taxibicycle: own			if somewhere else please specify location		
	bicycle: hired					
	on foot	. 🔲	Q18	What did you do there? Please tick all that app	oly.	
	other			recreational walking		
	if other please specify			exercising dogs		
				jogging/running		
				relaxing		
Q13	if car or van how many vehicles did you travel in? What have you done/do you plan to do while here? Please tick <u>all</u> that apply.		_ _	picnic		
				watching wildlife		
Q14				cycling (mainly off-road) on own bike		
	recreational walking			cycling (mainly off-road) on hired bike	$\overline{}$	
	exercising dogs			cycling (mainly on-road) on own bike	·님	
	jogging/running	\Box		cycling (mainly on-road) on hired bikes	\cdot	
	relaxing	\Box		visiting cafe/pub/tearoom	·	
	picnic	一		shopping for food	·	
	watching wildlife	$\overline{}$		browsing the shops	\cdot	
	cycling (mainly off-road) on own bike	$\overline{}$		visiting castle/museum	ـــــــــــــــــــــــــــــــــــــ	
	cycling (mainly off-road) on hired bike	\equiv		passing through	_ا.	
	cycling (mainly on-road) on own bike			parking/collecting the car	. 🔲	
				other	. 🔲	
	cycling (mainly on-road) on hired bikes			if other please specify		
	visiting cafe/pub/tearoom					
	shopping for food					
	browsing the shops					
	visiting castle/museum					
	passing through					
	parking/collecting the car	·H				
	otherif other please specify					

Q19	How did you get there? (Please select the mode of transport used for the longest part of your journey only).		What will you do there? Please tick <u>all that apply.</u>		
	car or van		recreational walking	一	
	train	H	exercising dogs	\equiv	
	bus: New Forest Tour	H	jogging/running	=	
			relaxing	.∐	
	bus: Forest Bus	一	picnic		
	bus: Forest Bus Baby	$\overline{}$	watching wildlife	.∐	
	bus: local bus service		cycling (mainly off-road) on own bike	. 🖳	
	minibus	H	cycling (mainly off-road) on hired bike		
	coach		cycling (mainly on-road) on own bike		
	Twizzy/electric vehicle		cycling (mainly on-road) on hired bikes		
	campervan/motorhome		visiting cafe/pub/tearoom		
	motorbike		shopping for food	. 🔲	
	taxi		browsing the shops		
	bicycle: own		visiting castle/museum	=	
	bicycle: hired		passing through		
	on foot		parking/collecting the car	\equiv	
	other		other	一	
	if other please specify		if other please specify	· Ш	
Q20	Approximately what time did you arrive there? (use format e.g. 12:30)		How will you get there? (Please select the mode of transport used for the longest part of your journey only).		
Q21	How long did you stay there?		car or van	. 🔲	
	less than 30 minutes		train	. 🗖	
	30 minutes - 1 hour		bus: New Forest Tour	. 	
	1 - 2 hours		bus: Forest Bus	Ē	
	2 - 3 hours	$\overline{\Box}$	bus: Forest Bus Baby	Ħ	
	3+ hours	$\overline{\Box}$	bus: local bus service	一	
Q22	Where are you going to next?			一	
	back home		minibus	一	
	back to accommodation	Ħ	coach	一	
	somewhere else		Twizzy/electric vehicle	\Box	
	if somewhere else please specify		campervan/motorhome		
			motorbike	\exists	
			taxi	·	
000	In the Leavest Const. do although a family day.		bicycle: own	· -	
Q23	Is that your final destination for today?		bicycle: hired	·	
	yesskip to Q28		on foot	·	
	no		other	. Ш	
	if somewhere else please specify	\neg	if other please specify		
				- 1	

Q26	How long will you stay there?	Q29	What aspects make the New Forest special compared to other places you have visited?
	less than 30 minutes		(Please list first three comments).
	30 minutes - 1 hour		
	1 - 2 hours		
	2 - 3 hours		
	3+ hours		
Q27	What is your final destination today?		
	home		
	accommodation		
	somewhere else		
	if somewhere else please specify		
Q28	How often do you visit the New Forest National	Q30	Are there any aspects of your visit to the New Forest that you didn't like? (Please list first three comments).
	Park?		,
	every day		
	twice a week		
	once a week		
	once a fortnight		
	once a month		
	a few times a year		
	not visited in the last 12 months		
	not visited before		
		Q31	How would you rate your overall level of enjoyment of the New Forest today?
			very high
			high
			average
			poor
			very poor
			don't know
		032	Home postcode or country of origin if overseas
		QUL	visitor
and i	New Forest National Park Authority have an ongoin improving the visitor experience whilst working to pappy for us to contact you to further assist with this	protect	
Oss	Name	035	Telephone number:
		400	
O3/I	Email address		
JUT			

Appendix D

2015 Interview Review

Staying Visitors

Interview Location: Lyndhurst

On the day of the survey they had cycled from their campsite to Lyndhurst as part of a recreational bike ride, their planned next destination on their bikes was to Brockenhurst where they would visit a café/pub/tearoom. Over the course of the day they would probably cycle 20 miles (my estimate) This was their first visit to the New Forest. The aspects that they felt made the New Forest special were that it was "unspoilt" and "peaceful". They didn't like the busy roads. Their overall level of enjoyment of the New Forest that day was 'very high'.

Alan and Alice are on holiday in the New Forest as part of a larger tour of the area which included a stay with their daughter and grandchildren in Poole. The New Forest is their last stop off before returning home. They are staying in their campervan and before arriving in the New Forest they stayed at the coast between New Milton and Barton on Sea. Their visit could be considered to be part of a chain of trips.

They are a retired couple, both aged 65+. Their stay in the New Forest is for five nights at Bartley which they booked around three weeks in advance of their stay. Many of the sites were fully booked by then. Walking and cycling were their main activities. They had brought their own bikes with them and at the beginning of their stay they cycled into Lyndhurst and bought a cycle map to help them decide where to go. The map was important in helping them find their way around the tracks.

Alan comments that the traffic is worse in Lyndhurst than the day of their arrival due to the improvement in the weather and more people venturing out. I feel that this was a case of rationalising for the conditions.

When asked how they usually travel when at home the immediate answer is "in a car" but then it is added that they also use the local bus. The bus was mainly used for shopping (in Birmingham City Centre) whereas the car was used more for 'family'. They both have bus passes so it is free to use the local bus during off-peak times. Alice considered that using the bus is a lot easier than parking and also noted that the bus stop was right outside their house. They don't live far from the railway station but use the bus which unlike the train it is free to use off-peak. Also their local station is not served by all trains passing through.

They both considered it feasible to travel to the New Forest without a car in that it would be possible to come by train and that they had managed to get around without a car. They are selective where they drive to as it's not always possible to park their motorhome so they "tend to have bikes or walking".

"We don't very often use the motorhome once we have parked up, do we?"

Key points:

This is not a simple holiday trip from the Midlands to the New Forest and back, it is linked with a wider tour of the region (Dorset and Hampshire).

Their campervan imposes its own restrictions to driving, creating a basecamp effect where sustainable modes are easier to use.

People can be 'locked-in to' sustainable travel

Traffic was accounted for with respect to popularity of the destination given the change in weather (it is possible that this was accepted as normal?).

They are fit enough to get around on their bikes covering significant distance (estimated around 20 miles that day).

They headed to Lyndhurst at the beginning of their stay to get information (cycle map). This was their first visit to the New Forest.

They used the bus and car at home but didn't mention their bikes. The bus was free for them to use and very convenient (it runs every 30 minutes with a stop outside their house).

Rail isn't used due to cost and frequency of trains stopping at Water Orton.

Areas for consideration in 2016 interviews

Journeys across the course of a stay rather than just one day.

More investigation into their use of transport at home and at other destinations, do they use the train/bus/cycle when they visit other places?

The reasoning behind mode choices – with caution that interviewees do not have to invent reasons for what they do. Perhaps consider in terms of origin/destination.

Staying with relatives

Interview location - Brockenhurst

Barry was visiting the New Forest for a day with his partner during their visit/stay for two nights with family in Portsmouth although they actually live in Godalming. They are both aged between 25 and 34. At the time of the interview Barry's partner had gone to the shops. They had cycled to Brockenhurst on road bikes from Winsor, where they had parked their car. They parked in Winsor having left the motorway early to avoid traffic and this was the first little village that they arrived in. They had planned their visit the day before, depending on the weather.

Their route wasn't planned but they have a GPS and had Brockenhurst in mind for a destination. They had however been before and were familiar with the area although previously they had hired bikes and used the Forest tracks.

Barry and his partner had recently moved from London to Godalming. From here Barry typically used the train to commute into London alongside some working from home. Other activities, visiting friends, the gym etc. they generally used their car. Since they have moved they haven't used buses although they used them a lot when they lived in London. They live more out of town. However, anything within about 5 miles they like to cycle for exercise and to reduce emissions.

When asked about other journeys by train, it hadn't been considered as they had not long moved. Barry felt it would have been possible to travel to the New Forest without their car but considered it in respect of first travelling to Portsmouth by train from their home in Godalming, acknowledging that there is a direct train. He considered that it would have needed more planning and they would have needed to take their bikes on the train. However, he was unsure whether there was a good train from Portsmouth to Brockenhurst but thought that they may have needed to go almost back home.

Barry considered that he had very little knowledge of public transport in the New Forest, his perception was that there would be little available.

"I don't know, I have very little knowledge of public transport in New Forest and I think my perception is that there isn't really very much here and I don't know what that's based on but that's my perception."

Barry liked the New Forest for its horses, wildlife, that is was good for cycling as flat and easily accessible from the relative's house and that other than the South Downs it is the closest.

Key points:

They had chosen to visit the New Forest to coincide with their stay with relatives. This would have saved overall journey miles/time compared to making two separate visits.

The New Forest may not have sufficient draw to warrant a long car journey for a day-trip. The South Downs was cited as being the closest – this may be their first choice when at home although it is much hillier.

Barry was conscious of emissions and the need to drive less but hadn't considered this in respect of longer journeys instead shorter journeys were undertaken by bicycle.

Barry and his partner 'parked and cycled'

Barry had limited knowledge of public transport in the New Forest and also of train travel to the New Forest. They visit a few times a year so they may never seek transport information related to the area beyond deciding what cycle route to take.

Areas for consideration in 2016 interviews

Family connections with the New Forest.

Other areas visited, other ANOBS, National Parks – is there one which is more local? The range for undertaking day trips.

Propensity to park and cycle, park and walk, park and ride.

Staying visitors

Interview location – Lyndhurst

Colin and Collette are a couple both aged between 55 and 64. They were on holiday, staying for 8 nights in Bournemouth in a hotel having travelled from Hull in their car. They had driven to Lyndhurst directly from their accommodation with the intention of looking around the shops possibly staying in the village for 30 minutes to an hour. Following this they planned to stop at Lymington or possibly Beaulieu Road with the intention of getting something to eat. They would travel there in their car. Their final stop would be at Bashley where they would be watching a football match. They had visited before but not in the last twelve months.

The football match in Bashley was the main reason for being in the area that day although they felt they would have visited at some time during the week and may in fact return on another day.

Barry considered Lyndhurst town to be the busiest place in terms of traffic but only because it is very popular. He seems quite comfortable with this.

They had also visited Weymouth but had gone on the train for a change because they like travelling on the train as it is more relaxing.

When asked how they mostly travel at home "by car" was the immediate answer, however when asked about whether they used the bus Collette said she used it to travel to work every week. They rarely used the train; "maybe twice a year to go to London".

Colin did think it was possible to travel to the New Forest by train with a few stops but felt that the car offered flexibility for travelling around. He did however acknowledge that there was the open top bus with three separate routes.

Key points:

This is a day out from Bournemouth with the purpose of the visit shared with going to a football match at Bashley. An element of linked trips. They may visit again during their stay. On reflection it would have been interesting to understand whether a subsequent visit would be combined with their journey home. Or on the last day do people just want to get back?

They were happy to undertake other excursions by train (to Weymouth) and saw this as advantageous however they had chosen not to come to the New Forest by train. This is likely to be because of the need to visit Bashley for the football match. Although the football club is just 1.4 miles from New Milton station, this would not have provided for a trip to the New Forest without a lot of planning and the walk to the football ground is along a busy 'B' road with limited footway provision.

Barry had quite detailed knowledge of the New Forest Tour which sounds like it has come directly from either the website or a leaflet.

Barry had a very relaxed attitude to the traffic in Lyndhurst identifying the popularity of the location as the reason for the heavy traffic. Even when stating aspects of the day they didn't like it was half-hearted "maybe the traffic".

Areas for consideration in 2016 interviews

Would have been interesting to learn about other excursions they would take during their stay and how the travel when they visit different places.

Staying visitors

Interview Location - Brockenhurst

On the day of the survey Derek and Denise have cycled on their own bikes to Brockenhurst with the intention of browsing the shops before returning to their campsite.

Derek is on holiday with his wife, staying in their touring caravan at Black Knowl campsite to the north of Brockenhurst. They are aged between 55 and 64 years old. They booked ten months ago to secure a space over the Bank Holiday. This represents one of their main holidays, they usually take about three, sometimes abroad. They are staying for five nights and are members of the caravan club. They have been mostly cycling, they are a little limited on visiting places such as National Trust houses with their dog. The dog is transported in a specially made dog basket for the front of the bike. They don't plan their routes as they know the area very well and have a well-used map (printed at home) to navigate.

They always come off the motorway at Fawley to avoid traffic tailbacks into Lyndhurst. He is puzzled why traffic is not redirected.

When he is at home he usually travels by car although when on his own he uses his motorcycle or cycle. He used to have a long commute by cycle. For a bike ride he would probably do about five miles. He avoids buses like the plague! He does however make use of the train for travelling into central London. He compares the cost of using his scooter with that of the train for other journeys and considers the scooter to be significantly cheaper. However, they have used the train when staying in the New Forest to visit Lymington:

"We have caught the train once or twice into Lymington, rather than faff around, a bit like London, you know..."

They have cycled to Brockenhurst once and put the bikes on the train and had a bike ride in the Lymington area. Other times they have walked to the station. Although they plan a trip to Lymington the next day but will probably take the car, despite this he speaks negatively about the need to fight for a parking space.

They both feel you can get around the New Forest without a car using bikes, with Lyndhurst and Burley being a reasonable cycling distance. Although he is less sure about the bus services.

Derek does have experience of having to travel home early from the New Forest one year for work and using the train to get to London, so they recognise that it is possible to reach the New Forest without their car. He notes its expensive though.

Key points:

The campsite represents a base camp for daily excursions many of which are on foot or bike.

They are open to using the train and have used it to travel to Lymington, they compare this to their use of train for journeys to Central London.

Their cycling range at home is about five miles. But they consider Burley and Lyndhurst to be reasonable cycle distance suggesting that they probably do more miles when considering the return journey. It is their view that you can get around the New Forest by bike.

Having the dog restricts where they can visit.

They have a Lyndhurst-traffic jam avoidance route that they use every time.

Areas for consideration in 2016 interviews

It's interesting that Derek compares the use of the train to get to Lymington to his use of the train to access Central London. There is a reoccurring theme in that people who use the train only occasionally do so to access City Centres (their local one or London). This could be exploited in a leisure context where unfamiliarity makes driving more stressful and by contrast the train more appealing.

Are people prepared to pay more to use trains and buses when they are on holiday? It would have cost them more to go on the train to Lymington than to park and use petrol (marginally, albeit not accounting for the cost of the car etc).

They consider that the New Forest is easy to get to which seems to be part of the attraction. The draw of a rural destination could be explored further perhaps by asking what other destinations people go to and why.

It would also be helpful to explore more the overlap of cycling as transport and as leisure with questions about what they liked about the cycling and the sorts of places/journeys they will take during their stay.

Staying visitors

Eric an Ella are staying in their motorhome in Ashurst. Ella is aged between 55 and 64 and Eric is 65+. They are staying for eight nights. Their reason for visiting the New Forest was to attend a football match at Southampton. They chose to camp at Ashurst so they could get the train to Southampton for the match. They wanted to be able to walk to the station from the campsite as they didn't want to cycle in the dark. They booked at the time the fixtures were announced. They have camped here before so knew the availability of different campsites.

On the day of the survey they had cycled to Lyndhurst to shop for food taking a scenic route through the Forest afterwards they planned a leisurely cycle back to the campsite.

They use cycling to get around but talked at length about using the NFT. They used the NFT to visit Bucklers Hard taking their bikes on the bus. They found this very convenient. Their decision to take the NFT was partly influenced by wanting to avoid busy roads cycling to Brockenhurst, they felt the route through the Forest was too long. They enjoyed the commentary on the NFT and planned their day around it also using discounts offered.

They felt the numbered cycle routes were a bit limited and they had cycled on tracks not designated for cycling, albeit unintentionally. They used a track parallel to the road although they were aware of the cycle path on the road between Ashurst and Lyndhurst but they wanted to come through the Forest.

They mainly travelled by car when they are at home and said they had two cars as well as the motorhome. When questioned further they said they did walk and cycle and discussed how they were trying to make Norwich more cycle-friendly. However, Eric considered in detail that you needed to be able to access the City Centre by car for practicality and convenience. They considered that buses were not frequent (they actually live within 300m of a service to the City Centre with a 10-minute frequency) and there would be limited space for shopping. Eric has a bus pass though, but he wanted door to door transport. Ella would rather just walk.

They don't use the train much. Again they talked about trains only in the context of going to London. They would camp within the M25 and use the local train to get to London centre.

They felt it was feasible to get to the New Forest without their car if it was possible to bring their own bikes. Eric preferred using his own bike which he considered to be better quality and also in respect of the cost of hiring bikes.

Problems associated with using the motorhome (losing their pitch) meant that they used their bikes to get around. Despite this, the fact there aren't marked pitches in the Camping in Forest campsites contributed to their attractiveness.

They didn't know about the Forest Bus even though it passed by their campsite but Eric was receptive to the idea of using it.

Key points:

Eric and Ella had a more limited range for cycling compared with Derek and Denise this is perhaps related to their age.

The motorhome provided a basecamp from which sustainable journeys were made.

The proximity to the station in Ashurst was the main reasoning for staying at that location given the main reason for visiting the New Forest was to attend the football match in Southampton.

They seemed unfazed by the cost of the NFT for their trip to Bucklers Hard, they made it a day out with the NFT forming a big part of their experience.

Otherwise Eric is very negative about local bus service where he lives.

The journey can be considered to be of a base-camp type but features a linked trip purpose.

Areas for consideration in 2016 interviews

For Eric buses were to be avoided, but in the New Forest he was much more receptive to the idea of using them, including the Forest Bus which would be more like those back home in Norwich.

It might be worth exploring different meanings for modes in different contexts.

Fred and Freya – Fareham

Fred and Freya are on a day trip from their home in Fareham. They are both over 65 and are visiting Brockenhurst for a walk having arrived by train.

They have a 'Severn Solent' rover ticket and have been undertaking a number of day trips by rail. The ticket allows them to travel 8 days in a fortnight over quite an extensive network which includes the New Forest. They both had Senior Railcards and the rover ticket cost them only £46 each. They planned to work out how many miles they had travelled using the rover ticket but they estimated that they would have travelled around 1000 miles.

Their decision to visit Brockenhurst was made a couple of days before. They had planned to go to Bournemouth the previous week but the trains were very busy (possibly because of the Bournemouth Air Show) so they visited Axminster instead. They travelled there via Salisbury, it was a long journey and they only stayed an hour as they needed to make sure that they can get back the same day.

Whilst this wasn't their first visit to the New Forest, it was their first visit to Brockenhurst. They were there partly to do a recce to see the feasibility of bringing their mountain bikes on the train next time.

"we are investigating how to put them on the train because it's quite a drive down here, its nearly 40 miles so its 80 miles we might as well, alright we will have to pay for the train ticket next time, a normal day return but with our senior citizen's railcard we can probably get down here for about £20. £10 each. And thats less than the price we would have to pay for bicycles, so we can bring our own bikes and they are free on the train which we found out."

When they bring their bikes next time they will plan a route in advance, they had found maps on the internet and considered that they may use an Ap that was available.

When they are at home they use the bus because they have bus passes, they also use the car and the train. The car was used for shopping and family and also for visiting other Women's Institutes (WI) as Frances is a WI advisor. Frances' WI head office is in Winchester, she drives and uses the train to get there, roughly half and half. They use the train and the bus to avoid congestion and because the bus is free.

They felt it was feasible for most people to travel to the New Forest by train and cited some of the Group Save offers that people might be able to use. They discussed the implications of having to bring children's buggies but considered that they had seen a great number of families on the trains over the last week, particularly around Weymouth.

They did however consider that getting about the New Forest from campsites which were not in the Brockenhurst area would be very difficult with no public transport. Frances considered that local bus services to smaller villages was poor based on discussions with other WI members from the New Forest area.

Key points:

There was considerable flexibility in when and where to visit because of the rover ticket. Frank and Frances seemed to get maximum value from the ticket and would even calculate their potential savings.

They were comfortable using various modes of travel but are motivated to use the bus and the train to save money (bus) and avoid congestion.

They were confident about putting their bikes on the train and considered that is was worthwhile doing this rather than hiring bikes which would cost significantly more than the rail fares.

For them the distance for driving made travelling to the New Forest by train a more attractive option.

It would have been interesting to know whether they had a cycle rack for their car and if so how they felt about using this; did they find it cumbersome?

Also it may have been interesting to understand whether they used their bikes much at home.

The planned cycle ride would be a recreational activity for the day – not a mode of travel.

Areas for consideration in 2016 interviews

Older people seem to have a much more in depth knowledge of public transport and how best to save money. They are also more receptive to bus use and the potentially longer journey times.

They will use buses and trains even when they have a car available. This seems to be motivated by both cost savings and avoiding congestion. It would be useful to explore the meanings of the different modes of transport used for the visit (and past and future visits).

Graham and Gertrude

Graham and Gertrude are between 16 and 24 and 25 and 34. They are camping at Roundhills Campsite for three nights. Graham lives in Eastleigh in Southampton and Gertrude lives in Winchester. They travelled to the New Forest by car and brought their own bikes with them. On the day of the interview they had cycled to Lyndhurst with the intention of visiting a café or tearoom. They planned to cycle to Brockenhurst afterwards where they would also visit a café or tearoom.

The New Forest is local to where they live so it's easy to reach. They booked the campsite a couple of weeks before. They liked to cycle around, deciding as they go using a map they bought from the campsite. They have no issues with finding their way around as they have been 'hundreds of times'.

Traffic was heavy on the motorway they considered that this was to be expected as it was a Bank Holiday weekend. They came through Ashurst to avoid the queue into Lyndhurst.

At home they mostly used the van to get around but walked for local journeys such as to the local shops. They would typically drive into Southampton City Centre but they would walk into Winchester where Gertrude lives. They don't really ever use buses and didn't seem to have given them much consideration.

They use the train occasionally, usually to travel to London. However, they were considering using the train to visit Christchurch the next day so they would be able to drink while they were there. They thought train travel could be expensive but could however be easier in respect of not finding parking.

They felt it would be feasible to come to the New Forest for the day without a car and that you could get around without one.

Key points:

Graham and Gertrudes trip doesn't seem all that unsustainable, they may have driven to get to the New Forest but one they are there they travel using their bikes and also the train (albeit to allow them to drink).

Again the train was something used for travel to London.

It would have been interesting to understand how they used their bikes when at home. Perhaps other places that they visit over the course of the year – wider rural tourism.

Areas for consideration in 2016 interviews

Wider cycle use.

Other rural tourism to other areas. Do they visit other rural destinations as frequently? What do they do there?

Holly and Harry – Shrewsbury

Holly and Harry are staying for three nights in a B&B in Lyndhurst, they are both aged between 45 and 54. They travelled to the New Forest by car from Shrewsbury. On the day of the interview they were taking a walk and planned to visit a café/tearoom/pub.

They have been visiting for a long time. They decided to visit two weeks ago to get away from the stress of moving house, so they booked just two weeks ago. They have mainly been walking they are familiar with the area and have a walk around Lyndhurst that they really enjoy.

They had a 'horrendous' journey to the New Forest. Although the queue into Lyndhurst wasn't as bad as they though it would be:

"we were queuing into Lyndhurst but it wasn't bad as we thought, it wasn't too bad at all, just a tenminute queue actually into Lyndhurst"

Note a ten-minute queue in any other context would perhaps be considered more of a problem. No deadline – don't need to get to holiday on time.

They never use the bus at home. They considered it to be just as cheap to get a taxi. They did occasionally use the train, mainly to travel to Wolverhampton and Birmingham.

They though travelling to the New Forest by train would be very expensive but potentially more relaxing. In addition, they had a new car which was quite efficient so was comparatively much cheaper to use.

"What would be the cost of that? is it cost prohibitive, I don't know. I would say it would be very costly, plus. On your own you would probably think about it. To the New Forest, we bring so much, you need your wellies and you have to bring so much. Surely if there is two of you it just pays to come in the car. yes."

They didn't feel a car was necessary to get around the New Forest. They noted the availability of the hop-on hop-off bus and other buses which would be cheaper.

They didn't know that there was a direct train to Brockenhurst from Wolverhampton.

Key points:

There points about the cost of train travel are likely to wholly justifiable. Travelling by car would have been the cheapest option by far. However, they seemed to like the idea of travelling by train as they considered that it would be more relaxing.

Because they loved to walk they were comfortable with travelling around the New Forest without a car and had noted and considered the bus provision, this is despite them never using buses at home.

This suggests that how people travel at home has little bearing on how they are prepared to travel whilst on holiday.

Areas for consideration in 2016 interviews

Other journeys they might take while on holiday in the area.

Other places they visit – other rural destinations and the frequency they visit.

Walking at home.

Janet and Julie - Sussex

Imogen and Ingrid are both aged 50 and were staying for the night at Burley YHA. They had just finished cycling the Devon Coast to Coast with some other friends and wanted to finish their holiday by cycling through the New Forest.

They had travelled by train from Plymouth with a couple of changes. They have quite a lot of experience of taking their bikes on the trains and usually book their bikes onto the trains in advance.

They had intended to catch the train to Sway but had been forced to get off at New Milton as the train was longer than the platform and their bikes and luggage were on the wrong part of the train when they arrived. They then had to stay on the roads as it was getting late and they had trouble finding the Sustrans route from the station. They found this quite scary as the cars were driving so fast.

The next day they cycled to Southampton to get their train home.

They booked all of their train travel a long time in advance to get cheaper tickets.

At home Julie uses bike, bus and train to get around. She uses the train to go to London mainly. She would sometimes get the bus to work, mainly if she was going to London on the train straight after work (presumably to avoid leaving the car overnight at the station).

Julie didn't think people could come to the New Forest without their car as there weren't many options for travelling around. She hadn't seen any buses (although she had only just arrived the previous day).

Key points:

Train service didn't allow them to even get off with their bikes where they had intended and this impacted on their cycle journey as it was more difficult to find the tracks and they experienced faster traffic.

This stay could be considered as a pass-by visit.

There is an assumption that there are no buses even in the absence of any really experience or knowledge – so the new visitor's baseline could be that which assumes that a car is necessary.

Appendix E

Defining sustainable transport in rural tourism: experiences from the New Forest

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Defining sustainable transport in rural tourism: experiences from the New Forest

Transport policy agendas have long sought to bring about more sustainable transport at tourism destinations. While there are examples of successes, it remains unclear what inroads have been made towards creating a sustainable transport future. Policy directions have evolved over a number of years and in many tourism destination contexts it is far from clear what a desirable transport future looks like. When translated to implementation, the aims of initiatives can be unclear and baseline measures inconsistent, making success difficult to judge. This paper analyses how sustainable travel has been implemented in practice at a destination level. The focus is rural tourism and data are derived from a specific case, the New Forest National Park, UK, where a wide range of transport initiatives have been implemented since the Park's designation in 2005. The study adopts a social practice theory perspective. Data are derived from a visitor survey, interviews and observations. It finds there is scope to improve sustainable transport provision at destinations through understanding visitor practices, but limited scope to influence meanings associated with visitor travel and travel skills. Policy meets the needs of some visitors more than others.

Keywords: rural tourism; sustainable travel; social practices; national parks

Introduction

The potential for motorised transport to detract from the rural tourism experience was identified well before the concepts of sustainable development and sustainable travel. For example, in the UK, the Dower committee cited visitor traffic as a key issue impacting on 'landscape beauty', 'peace and quiet' and 'enjoyment' (Dower, 1945 p25 in Cullinane, 1997), recommending restraint on traffic growth in national parks (Cullinane, 1997). Since these early warnings the volume of traffic in protected landscape amenity areas across the globe

has grown rapidly (Holding, 2001) aligned with dramatic increases in road traffic, though now abating (Lyons, 2016), increasing leisure time (Organisation for Economic Co-operation and Development, 2010) and affluence (Paulley et al., 2006). As a consequence data indicates 80% of all day visits to the UK countryside are made by car (TNS 2016).

An interventionist policy approach has been adopted to address traffic volumes in rural destinations and to encourage a modal switch by visitors from car to 'more sustainable' modes of transport. Policy emphasis has changed over time from congestion and intrusion to place a greater emphasis on reducing greenhouse gas emissions (World Economic Forum, 2009). The sustainable development discourse embraced by transport policy is generally aligned to safeguarding long-term ecological systems (Beunen, Regnerus & Jaarsm, 2008) and less towards social equity agendas that are often prevalent in utility transport contexts (Lucas, 2012). There have been several calls for more equity in leisure travel opportunities (for example, Dubois & Ceron, 2006; Holden, 2007; Høyer, 2000) and the UK Government seeks to support National Park Authorities in removing transport barriers to access (Department for Environment, Food and Rural Affais, 2016).

Visitors to rural destinations will make several trips on a single day, sometimes using multiple modes of transport, with the journey often forming part of the overall experience (Lumsdon, Downward & Rhoden, 2006). Visitors are typically seen as two homogeneous groups, day visitors and staying visitors, whereas there are many different segments of visitors within these two groups including very short distance, high frequency day visitors. Understanding the complexity of visitor travel requires a novel approach to data collection.

This paper draws on social practice theory (Shove, Pantzar & Watson, 2012) to address the complexity of visitor travel. The paper analyses how sustainable travel has been implemented in practice at a destination level using the case of the New Forest National Park, UK. Focusing on visitor travel practices, the paper explores the extent to which these travel

practices are sustainable, how well policy interventions align with these practices and investigates those visitors most susceptible to react positively to interventions. The scope of the paper is the tourism day visit, defined as a non-routine visit of three hours or more including travel time (TNS 2016). It excludes short duration leisure activities undertaken by local people in the vicinity of their homes.

Policy approaches

Despite an assumption that rural tourists might display relatively high levels of environmental awareness and be motivated to reduce their impact, the car share of tourism travel increases with rurality (Speakman, 2005). The car is the default modal choice for rural trips which can be attributed to remoteness of locations, the poor availability of public transport, both in terms of route density and frequency, the activities undertaken in the rural areas often requiring bulky equipment (for example, camping) and the absence of perceived problems of using cars for these trips. This presents major challenges to control levels of traffic to rural destinations and resident perceptions are that traffic-related problems in National Parks are getting worse (Dewhurst & Thomas 2003).

A range of schemes have been implemented over many years. Research has identified a number of practical problems with these initiatives leading to individual failures, the most common cause being the short term nature of many schemes due to funding constraints (Cullinane & Stokes, 1998: Dickinson & Dickinson, 2006). Significant change in transport practice takes time to achieve.

The first approaches to control traffic levels were traffic management techniques, adapting strategies developed to manage traffic in urban areas (Cullinane, Cullinane, Fewings & Southwell, 1995; Cullinane & Cullinane, 1999). Traffic management strategies largely focussed on constraints and barriers to car use. They included road closure schemes often

combined with bus or shuttle services (for example, the Upper Derwent Valley, Peak District National Park, UK or Zion National Park, USA), traffic calming and parking controls (Graham, 1998). Early research on the problem indicates that whilst such approaches addressed the worst problems at 'honeypot' visitor attractions, such as congestion and visual intrusion, they failed to reduce car travel to rural destinations or significantly reduce emissions and most were isolated, small initiatives (Cullinane, 1997). Many schemes also faced strong local opposition amidst fears of lost tourist revenue or personal inconvenience (Cullinane et al., 1995; Dickinson & Dickinson, 2006).

Over time policy evolved to encourage modal shift, initially focused on encouraging public transport use. Examples include specialised tickets such as Wayfarer in West Yorkshire and Greater Manchester from 1983, or a specifically designed network of bus services such the Island Explorer in Arcadia National Park, USA (Holly, Hallo, Baldwin & Mainella, 2010). The success of such schemes were measured using passenger numbers and ticket sales (Cullinane et al., 1995), whilst studies explored the motivations of users to switch mode from car to bus in order to develop strategies to further encourage and accelerate modal shift (Guiver, Lumsdon, Weston & Ferguson, 2007; Lumsdon et al., 2006). Although some estimates of 'saved' car journeys were made, such as Moorbus in the North York Moors National Park (Robbins & Dickinson, 2007), these constituted a very low share of the total car journeys and there was no robust systematic analysis of the benefits of such schemes.

In the UK, The Transport Act 1998 (Department of Environment, Transport and the Regions, 1998) proposed a range of sustainable transport options for the UK which were then adopted and adapted for tourism journeys (Department of Culture, Media and Sport, 1999). Key policy objectives included 'to make it easier for people to make more informed decisions about their travel choices' (DCMS, 1999, p. 56) through 'a switch away from car to less

polluting forms of transport' (DCMS, 1999, p. 57). However, the policy objectives were not developed beyond a desire to promote modal shift.

There is an assumption that modal switch from cars to alternative modes of transport must in itself be more sustainable, though there is potential for conflicting policy outcomes. For example, some bus service improvements have been funded on grounds of improved social access, and schemes that increase visitor arrivals, particularly from those without access to a car, without reducing the number of cars may increase CO₂ emissions.

UK Government transport policy evolved further with the creation of the Local Sustainable Transport Fund (LSTF) (Department for Transport, 2011). LSTF funded 96 transport packages at a cost of £1 billion including Sustainable Transport Solutions for England's two newest National Parks, awarded jointly to the New Forest and the South Downs National Parks, one of a small number in rural areas. LSTF placed much greater emphasis on reducing transport emissions whilst continuing to achieve economic growth, and continued a focus on behavioural change.

One approach was to encourage modal shift to the tourist destination, making the car unavailable for use at the destination (DCMS, 1999). Alternative strategies accepted that the car is the most convenient mode of transport to the destination, with scope to severely limit its use whilst on the holiday. Examples include the development of tourist cards (for example, KONUS in the Black Forest, Germany) offering free public transport to tourists financed by a visitors tax (Durkop & Gross, 2012).

A further approach is to encourage cycling, particularly for short journeys. Like modal shift to bus, there is an assumption this will generate environmental benefits. This fails to acknowledge the distinction between cycling as a mode of transport and cycling as a recreation activity. Previous studies have identified that in some instances cycling activities involve a car journey, with cycles carried on car racks, which generates motorised travel

(Gale, 1996; Charlton, 1998; Dickinson & Robbins, 2009), however, there have been no attempts to quantify this behaviour.

Despite the awareness of a need to restrain traffic growth at rural destinations dating from the mid-1940s, cohesive policy has not been implemented. Currently UK bus services are provided in a deregulated market dictated by commercial viability (see White 1995), which is ideologically inconsistent with a planned network. Whilst authorities have the ability to supplement the commercial market with socially desirable subsidised services, this fails to produce a co-ordinated network and provision is also severely constrained by financial resources. Over time some policies have become more integrated, combining incentives to use more sustainable modes with car restraint, but without producing the desired reduction in the car share, though there are isolated success stories (Guiver et al., 2007; Lumsden et al., 2006). To date the majority of studies have been atheoretical (Dickinson & Dickinson, 2006), predominantly case studies (Cullinane, 1997; Holding & Kreutner, 1998), piecemeal in approach, with a simplistic assumption that any modal switch is desirable while initiatives lack clear objectives for sustainable transport outcomes.

Social Practice Theory

More recently, studies have sought to bring theoretical perspectives to the fore to identify reasons for consumer's modal choices and the apparent failure to achieve widespread modal shift. There is an increasing awareness that traditional attitude and behaviour studies do little to generate understanding of transport decisions (Dickinson & Dickinson 2006). They ignore various social, cultural and practical influences on consumers (Higham, Cohen, Peeters & Gössling 2013) and suggest the need for a more comprehensive understanding of tourist transport use to inform policy-makers. One approach has been to explore how transport behaviours are shaped by the social representations that circulate in society, where practices

become accepted and difficult to question (Dickinson & Dickinson 2006: Dickinson & Robbins, 2007) whilst other approaches include work on the role identities play in mobility decisions as high levels of mobility are portrayed in a positive light, irrespective of increasing consumer knowledge regarding the negative environmental impacts (Hibbert, Dickinson, Gossling & Curtin, 2013). One promising route of enquiry to understand the complexity of travel is social practice theory (Cairns, Harmer, Hopkin & Skippon, 2014) which is applied here to a rural destination context.

Social practice theory has its origins within the theory of structuration which links human behaviour with the wider social environment (see Giddens 1984). The theory of structuration recognises human activities as being "shaped and enabled by structures of rules and meanings; and these structures are at the same time reproduced by human activity" (Shove et al., 2012, p. 3). Interventions which aim to increase sustainability in the transport sector have focused on encouraging changes on an individual level (Cairns et al., 2014) sidestepping the underlying social structures that may strongly encourage forms of unsustainable mobility (Barr & Prillwitz, 2012; Dickinson, Robbins & Lumsdon, 2010). Shove (2010) argues that studies which focus on individual behaviours, tend to externalise, and therefore largely ignore, the context within which behaviour actually takes place. Ignoring this wider structural context fails to acknowledge that unsustainable behaviour may be 'locked-in' and therefore without addressing wider structural determinants, measures focused on encouraging behaviour change will have limited success (Hall, 2013).

Applying social practice theory places 'practices' at the focus of analysis. Reckwitz (2002) defines practices as "a routinized type of behaviour which consists of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, 'things' and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge". Therefore, a practice is a block of activity or

an 'entity' which is created and recreated by its repeated performance by individuals; the 'carriers' of practices. Individuals perform multiple social practices and these overlap, or bundle together or intercept to different degrees (Shove et al., 2012). Transitions in practices can occur as a result of changes in the constituent elements; changes in the carriers of practices or in the way that practices intercept with other practices (Watson, 2012).

Shove (2012) conceptualises social practices within the 'three elements model' consisting of:

- 1. Materials The materials or infrastructure used to perform a practice. In transport this includes roads, rail networks, cars and bicycles.
- Competences The understanding, use of background knowledge, know-how. For example, being able to read a bus timetable or ride a bicycle.
- 3. Meanings Motivations, beliefs. For example, the pleasure from riding a bicycle through countryside or the value of visiting a rural recreation site with family.

The model proposes that practices are dependent upon interrelations between these three elements and goes on to suggest that "if specific configurations [of practices] are to remain effective, connections between defining elements have to be renewed time and again" (Shove et al., 2012, p.24).

The three elements model has been adopted within this study as a framework for describing what constitutes a practice inclusive of the context within which it takes place, with the ultimate objective of understanding the sustainability of visitor transport in rural tourism. Here the practice is rural visiting for tourism purposes. Barr and Prillwitz (2012, p807) identify the need to "appreciate the different contexts and thus spaces in which activities such as sustainable travel are promoted" given that travel in a tourism context presents different attitudes and beliefs. Visitors use of transport in rural destination areas has been shown to embody meanings and competences which are very specific to this context,

furthermore rural transport infrastructure ('materials') presents significantly different characteristics and challenges when compared to urban transport provision. Within rural tourism the intrinsic value ('meanings') of transport use is significant (Eaton and Holding, 1996; Lumsdon et al., 2006; Guiver et al., 2007; Lumsdon & McGrath, 2011). Also, unlike daily commuting practices, rural visiting practices make use of transport on a less frequent basis and that degree of frequency will be reflected in the depth of visitor's knowledge of transport provision in this context ('competences').

Furthermore, just as multiple commuting practices exist (Cass & Faulconbridge, 2016), so must multiple visitation practices as the term 'visitor' does not necessarily represent a homogenous group. Shove's model is therefore used to bring these three elements together whilst exploring the potential for variation in practices in this context.

The New Forest

The New Forest was designated as a National Park in 2005 but has a long association with conservation and recreation. The Park has an area of 570 square kilometres and incorporates internationally important wildlife habitats. The availability of trails through forest and open heathland provides a popular destination for informal outdoor recreation alongside a number of more formal visitor and heritage attractions. Wild ponies roam free across the Park and are a significant visitor attraction.

The New Forest is similar to other western European national parks (see Beunen et al., 2008) in that is does not represent a truly wild area, with in-situ resident populations and a landscape which reflects a long history of human influence. Furthermore, the Park is not remote from urban areas being situated between two large built up areas; Bournemouth and Southampton.

In 2012 and 2015 the New Forest National Park Authority and South Downs National Park with various partner authorities received Local Sustainable Transport Fund funding

from the UK Department for Transport to implement sustainable transport initiatives alongside further funding to promote cycling within the Park. An increase in the proportion of visitors arriving to the National Park by sustainable modes and reduction in carbon emissions was sought (Hampshire County Council, 2012).

The New Forest represents a destination within which sustainable transport has evolved and continues to develop. The analysis of visitor travel practices within this setting provides an opportunity to review policy implementation and the relative success of the initiatives being implemented whilst allowing for reflection on the ultimate form that transport should take in protected landscapes.

Methodology

This research sought to identify the constituent elements of rural visiting practices, identifying aspects of sustainable travel and noting where policy interventions have enhanced this. The study employed a mixed methods approach which is consistent with a multi-level triangulation design (Tashakkori & Teddlie, 1998) utilising three methods of data collection. A mixed methods approach raises epistemological concerns (Bryman, 2001), especially in a concurrent design. In this study each method sought to capture different aspects of visitor travel. A survey, building on an existing longitudinal study, sought to quantifying visitor characteristics and transport mode use patterns to understand trends in response to sustainable travel initiatives. Qualitative interviews and observations focused on understanding visitor experiences, their interactions with transport provision and the meanings associated with the visit. These qualitative methods provided an understanding of visitor travel practices, how they are sustained and how well policy interventions work with the established practices.

Quantitative data was collected through a visitor survey (n. 657) conducted between mid-July and mid-September 2015 at eight sites across the New Forest National Park (as listed in Table 5). The questionnaire was administered over 23 days by a commercial survey

administration team, with some questionnaires administered by the lead author. Respondents were approached on a next to pass basis. Sites were carefully selected to meet a range of criteria including a sufficient volume of visitation as well as a cross-section of staying and day visitors. In addition the selected sites enabled a longitudinal comparison with previous National Park surveys.

The National Park Authority have surveyed visitors on an almost annual basis following an initial large study undertaken by Tourism South East in 2004 prior to the Park's designation. The 2004 survey incorporated over 70 survey sites and replication was too costly for subsequent surveys, especially as low numbers were captured at many sites. Subsequent visitor surveys have used fewer survey sites focused upon village centres and parking areas and the eight sites for the 2015 survey utilised sites from previous surveys enabling longitudinal analysis where appropriate, although new and additional questions were added to address limitations identified in the design of previous surveys.

The comprehensive 2004 survey presented some issues for understanding travel patterns. First, it captured many habitual short stay and short distance visits by local people, around 55% of day visitors reported visiting at least weekly (including 28% daily). The inclusion of small, peripheral, free car parks as survey sites captured a large proportion of routine dog walking trips made by the local population (Table 1). The aggregation of this group with 'tourism day visitors' and their inclusion in overall visitor statistics, which estimated 13.5 million 'visitor days' to the New Forest National Park in 2004 (Tourism South East, 2005) overstates the number of tourism visits to the National Park, the number of car journeys generated by tourism, and the level of car dependency.

A further limitation of previous questionnaire design is the focus on travel to the survey site which did not take into account the multi-site nature of the visitor day or the intermodality. The revised 2015 survey designed for this study collected information on visitor

types (day visitor from home, visiting whilst staying with friends and relatives, visiting whilst on holiday), and was profiled by age and the presence of dogs. The visitor's activity and mode of travel to the survey site was recorded, alongside those of any previous and intended subsequent trips. For staying visitors, the mode of travel used to reach their accommodation at the beginning of their stay was recorded. This new approach was needed to provide more robust data on visitor travel patterns providing greater clarity with respect to visitor origins and their use of transport both to reach and to move around the National Park. The survey also recorded the visitor's final destination that day to understand any pass-through trips. Descriptive analysis of the data was undertaken using SPSS.

[Table 1 near here]

Two phases of semi-structured interviews were undertaken with visitors during the summers of 2015 and 2016. Interviews in 2015 focused on all transport activities, including origin and destination on the day of interview, whereas following analysis of the 2015 interviews, the further round of interviews conducted in 2016 explored the meanings visitors associated with their visit alongside their existing knowledge (competences) in much greater detail. For staying visitors, the 2016 interviews explored travel practices across the course of the whole stay rather than focusing on a single day. The visitor survey was used as a 'gateway' to talking to visitors in more depth in 2015 using an opportunistic sampling strategy. A total of 50 interviews were conducted (10 in 2015 over 2 days and 40 in 2016 over 3 days). Interviews were recorded in-situ and based around a series of open questions and were relatively short, lasting around 5 – 10 minutes. Interviews were transcribed and the analysis explored individual narratives to understand meanings and competencies associated with transport use in the New Forest. Subsequently thematic analysis sought to identify patterns across cases.

Participant observation was employed to provide an understanding of visitors' interactions with and experiences of the transport provision available. Over the course of three years the lead author stayed at various locations in and around the New Forest National Park (Table 2) in order to gain an understanding of transport use from different visitor perspectives. The locations and activities were purposefully selected to gain insight into how structures can act to shape and influence practices. The use of participant observation can enhance both the quality of the data collected during field work and the interpretation of that data, whilst encouraging the formulation of new research questions (Dewalt & Dewalt, 2011). These perspectives primarily focused on the experience of staying in the National Park itself and in the immediately surrounding areas. Day visits were also made from the nearby urban areas of Bournemouth and Southampton reflecting significant visitor flows. During these periods of immersion, the lead author made use of the available transport provision to support daily activities and also explored cycling options including trips with school age children. All modes of transport were used as available at the location and suited to requirements of the group members and activity being undertaken. Observations were recorded in notes which were analysed in conjunction with interview transcripts.

[Table 2 near here]

Findings

A more nuanced picture of visitor travel in the New Forest emerges from the 2015 data (see Table 3 for an overview). When data are compared for like survey sites from 2004 and 2015 it is evident some positive modal shift from car has been achieved (Table 4). Further analysis indicates several aspects need to be considered in more depth to understand potential

sustainable transport gains and barriers: geographical location and transport availability; nature of trip; and group composition.

[Table 3 near here]

[Table 4 near here]

Geographical location and transport availability

In 2015, 83% of all staying visitors surveyed travelled to their accommodation in private vehicles at the beginning of their stay, for those staying within the Park Boundary this increased to 92%. Camping accommodation is predominant in the New Forest and, with the exception of a small number of camping pods, the vast majority of camping in the New Forest requires visitors to bring their own tents and equipment and hence cars to transport these items (Dickinson & Robbins, 2007). However, visitors staying in catered accommodation present more scope for travel to the Park by rail as direct and frequent services are available from several large urban areas in the UK. Findings from the interviews and observations identified three barriers to rail travel for staying visitors: cost, the need to transport equipment and knowledge of rail services and ticketing:

"...what would be the cost of that? Is it cost prohibitive, I don't know. I would say it would be very costly, plus, on your own you would probably think about it. To the New Forest, we bring so much, you need your wellies and you have to bring so much. Surely if there is two of you it just pays to come in the car. Yes...be relaxing to do it, lovely and relaxing but..."

(Couple aged 45-54 from Shrewsbury, staying for three nights in a Bed and Breakfast Lyndhurst)

"It is quicker and less stressful for me to travel by train to Brockenhurst or Bournemouth as the service is direct from Leamington Spa. However, if I am bringing my daughter along too, the cost is too high so I travel by car. When I do travel by train it would be useful to be able to bring my bike but there are only three spaces on the train for bikes and to reduce the cost I need to book onto a specific train, if these spaces are already full I would not be able to board with the bike and my ticket would not be valid on other services."

(Lead author observation)

The researcher observed that she built competence in ticket buying strategies during the research project to reduce the cost of travelling by train. It was necessary to book in advance and to book the journey in multiple legs which then required the matching up of seat reservations to bring down the cost of the journey.

Whilst staying visitors relied on their cars to reach the New Forest there was more use of non-car modes to travel around the destination. Variation was evident between those visitors staying in the National Park, who exhibited lower car use, compared to those staying elsewhere (Table 5). Accommodation which is located within closer proximity to the village centres provides the greatest potential for car free travel with direct access to forest trails, shorter distances to local facilities and local public transport services. Approximately 70% of bed spaces within the Park boundary, including several large campsites, are remote from scheduled public transport services. Two further large holiday parks, located on the periphery of the Park (both marketed with reference to exploring the New Forest), are remote from public transport and from the Park's trails.

[Table 5 near here]

Non-car access to key New Forest sites from these peripheral locations is challenging despite various initiatives such as the New Forest Tour (a circular bus tour) which during the summer months, links three holiday parks and passes within walking distance of number of campsites. The tour provides three interlinking one-way loops of the Forest calling at all main attractions and villages. Despite this, the New Forest Tour is marketed as an

'experience' as opposed to a bus service and users are expected to complete the whole loop.

The marketing, ticket pricing structures and one-way circular routes resulted in the loss of additional bus link opportunities.

"I had taken the train to Brockenhurst and intended to board the New Forest Tour at the station to get to Burley Youth Hostel. I had been reassured by the visitor travel advisor that I could buy a single hop ticket. A couple were also attempting to use the Tour to get to their hotel in Burley. However, the driver was unable to provide single-hop tickets, reiterating to both myself and the couple that this was a tour."

(Lead author observation whilst staying at Burley YHA August 2015)

The New Forest Tour offered the potential to provide bus travel between Brockenhurst and Burley. In 2015 the only bus serving Burley operated on summer weekends (this has since been withdrawn). Burley is a popular 'honeypot' site with several hotels, the New Forest's Youth Hostel and a cycle hire centre. The National Park Authority have since undertaken further negotiation with the Tour operator to make single hop tickets available but observations and interviews indicate they remain unadvertised and visitors are unlikely to be aware of their existence.

Significant variation in the proportion of all visitors arriving in private vehicles can be observed between survey sites reflecting the different transport choices available and the nature of the site with public transport shares at their highest for villages (Table 6). For example, Bolderwood provides a visiting experience which is not replicated elsewhere in the New Forest in that it offers toilet facilities, a barbeque area, open space, ranger services and a deer viewing platform. However, it is remote from public transport and is approximately 5km and 6km via roads and forest tracks from the nearest villages.

"There are certain parts of the Forest you can get to like Brockenhurst and places like that but then they are not like this so you have to weigh up what you want from that trip to the Forest don't you really?"

(Family group visiting Bolderwood for the day by car from Southampton)

21% of visitors surveyed identified cycling as an activity they would be taking part in during the course of their visit that day. Cycles therefore represent a material item of equipment that visitors would need to either hire or transport to the Park. Cycle hire is available from all of the village centres including a newly completed Family Cycling Centre adjacent to Brockenhurst Station that received funding in the recent initiative. Each cycle hire provider in each village operates independently requiring cycles to be returned to the point of origin, necessitating circular trips.

Cycles can be carried on trains but variation exists between individual train companies and a degree of competence is required to reserve spaces for cycles and understand where and how to load cycles within the limited time-frame for boarding.

Visitors must also consider the journey from their homes to the station, with less confident or less-able cyclists unable to undertake this initial journey leg by cycle. For example:

"It's really our first ever visit to have a look around Brockenhurst isn't it? Yes, yes and we have been doing sort of a recce.... and we want to bring our bikes down here probably in September and we are investigating how to put them on the train because it's quite a drive down here, it's nearly 40 miles each way so it's 80 miles we might as well, alright we will have to pay for the train ticket next time, a normal day return but with our senior citizen's railcard we can probably get down here for about £20. £10 each. And that's less than the price we would have to pay for bicycles, so we can bring our own bikes and they are free on the train which we found out."

"...we only live about half an hour's walk from the station anyway at Fareham but if necessary we can take the car and put them in the back of the car and park near the Fareham railway station."

(Couple aged 65+ visiting for the day by train from Portsmouth)

Both day and staying visitors must also consider the cost of hiring bikes to use during their stay particularly if they already have their own cycles.

"We have in the past hired bikes but again it's a kind of added expense, particularly as we have bikes that we use quite frequently and are used to. I think my bike, I think is lighter, easier to ride than some of the bikes you can hire and so I prefer using my own bike."

(Couple aged 55-64 and 65+ staying in their motorhome at Ashurst campsite)

67% of visitors who reported cycling as their activity at the survey site brought their own bikes with them to the New Forest and day visitors were less likely to be riding hired bikes.

[Table 6 near here]

Nature of visit

The survey data provides evidence of visitors combining car use with walking and cycling activities, utilising the network of small free parking areas. Many of these trips are circular and purely recreational although they may take in local sights and villages along the way. 12% of the survey respondents reported that they had stopped off somewhere else before arriving at the survey site and 42% planned to visit somewhere else before returning home or to their accommodation. 57% of visitors arriving on foot, by cycle or bus to survey sites undertook an initial journey by car from home or accommodation. Modal shares collected from a single spatial and temporal point therefore overlook car use that facilitates apparently sustainable modes of transport.

How visitors used transport in the Park was influenced by the nature of their visit in terms of the planned activities. Lue, Crompton and Fesenmaier (1993) identified five spatial travel patterns that are typically adopted by visitors, these include visits to a single destination, visits made en route to another destination and shorter visits made from a 'base camp'. Picnic sites in the New Forest such as Bolderwood provided a focus for day visitors who stayed predominantly in one area for most of the day depending on the weather. Whilst the visit to this main site was planned, visitors could make more spontaneous decisions about the routes taken, stopping off and whether they may go on somewhere after.

"We might look for a country pub or something and just have a quick drink on the way home"

(Couple both aged 65+ on a day trip to Bolderwood from their home near Bournemouth)

The interviews highlighted how trips to the New Forest were linked with other purposes or were made whilst passing through the area en route to somewhere else:

"...we are now on our way home but they [the grandchildren] have stopped to go cycling, so we are having the day here"

(Couple both aged 90 visiting the New Forest before returning home from a holiday in Bournemouth)

"We went to Southampton to pick up a part for a vehicle that's being fixed and it's kind of our way through so we thought we would stop and get some food"

(Mother aged 58 and Daughter aged 30 visiting as they pass through on their way home to Lymington and Ferndown)

Visits linked with other purposes or made en route to a different destination are less feasible without the use of private vehicles, although such visits may involve some element of walking or cycling as an activity.

Visitors staying in the Park displayed 'base-camp' type characteristics, making trips from their accommodation to different destinations within or near the Park with the journey forming part of the recreation experience.

"We use cycling as our main means of communication, although we did use the bus yesterday... we came into Lyndhurst with the original intention of cycling to Brockenhurst but then we had a look at the route which was pretty well on the main road unless we wanted to do a really long one through the Forest and decided that that wouldn't be a very pleasant journey like that and so we said lets get on the bus" (Couple aged 55-64 and 65+ staying in their motorhome at Ashurst campsite)

Here the motorhome formed a very literal base as moving it during the stay risked losing the camping pitch. The couple made use of cycling, trains and the New Forest Tour during their stay.

Group composition

The ability for visitors to travel to on foot or on bicycle is dependent on the competences of all the group members. The capacity to cycle was observed to be limited by age, degree of fitness and confidence, particularly with respect to the need to cycle on road. Family groups with younger children staying in campsites were observed to use cycles recreationally, undertaking short circular rides in the Forest. The need to transport cycles by car to facilitate a cycle ride for younger/less confident/less fit cyclists was experienced by the researcher and identified within visitor interviews:

"Christine had hired a bike from the hire centre on site and so far, Josie (aged 10) had only used it around the holiday park. I wanted her to experience cycling in the Forest but I was uncertain of how she would manage to reach the Forest tracks given that it was a couple of miles requiring a long down-hill section on the road. In the

end, we put two of the bikes in the car and I cycled down to meet them as it would have been a struggle to fit all three bikes in along with three passengers."

(Lead author observation staying at a Holiday Park, August 2014)

Whilst there is an extensive network of off-road tracks available for cycling, travelling between key destinations necessitates some cycling on busy roads where there is no specific provision for cyclists. For confident and/or regular cyclists, these busier sections can be more readily traversed but they represented an obstacle for other visitors, particularly family groups who were observed to ride along the very edge of the road, on the grass verges and on the pavements. This reflects the perception of cycling as an activity to be undertaken in 'safe' locations (Horton, 2007).

"it's just the main road out of Lymington, its unpleasant...we won't in total do more than 20-30 miles driving in a week within the Forest, we literally get to the first car park and unload...we see the car as a pain in a sense we are just wanting to be shot of it as soon as we can but very definitely not wanting to be [cycling] on open roads with heavy traffic dashing in and out of cars"

(Couple aged 45-54 staying in a cottage in Lymington)

Groups that included children reported higher car shares than adult only groups (Table 7), groups with children aged five showing greatest car use. Cycling with small children can limit the distance and time span over which a group can travel and more specialised equipment in respect of bicycle trailers is required. Adult only groups could cycle around the New Forest with greater ease and were able to use their bicycles both recreationally and practically but sought to avoid less pleasant on road sections.

[Table 7 near here]

Visiting practices and transport use

Using Shove's (2010) Three Element Model the findings have been used to explore the practices performed by visitors to the Park. Variation in practices exists with respect to how transport is incorporated into the rural tourism visit by different groups both in terms of origin, size and age profile of the group. This is discussed by mode.

Walking

Visitors travelling on foot represented a significant modal share for travel to village centres (Table 5). Walking is free and the relatively flat terrain in the Park requires no specialized equipment. Visitors on foot also benefit from open access to much of the Park and unlike cyclists are not confined to specific routes. Walking offers considerable flexibility in terms of distance and location and therefore presents more scope for combining with public transport and the New Forest Tour (which recommends suggested walks). Variations in walking practices make use of similar material elements, the trails and paths, whilst utilising cars, the network of car parks and public transport to reach the desired starting location. The meanings associated with walking are centred around a recreation experience representing an activity to be enjoyed during the visit and to be combined with other activities, for example family picnics in Bolderwood. For visitors staying within proximity to amenities it also provided a car-free form of transport. In terms of competences, the range or distance that visitors are able to walk was dependent on the ability and/or fitness of the group members. Smaller children and adults with more limited mobility were less able to cover distances but are also limited by other material aspects such as surfacing and gradient (Pezzo, 2010). Navigational competences were also required to different degrees.

Cycling

Visitors using hire bikes and visitors using their own bikes form distinct practices. Identifying the constituent elements of these practices highlights where these two practices diverge. With respect to 'meanings' for both groups, cycling in the Park is predominantly a recreation experience with both making use of forest tracks and avoiding busier on-road sections; unlike commuting, pleasantness is more important than directness or saving time. Cycling offers both groups the opportunity to enjoy the natural environment (Meschik, 2012). However, the own-bike cyclists were also able to use their bikes as a means of transport, this is particularly applicable to visitors staying within or close to the Park with their cycles being used from their 'base-camps' to visit different locations during their stay. Conversely, the material or structural elements of cycle hire shaped how the hire bikes are used. These structural elements included the requirement to return cycles to the point of origin within a specified time frame; the cost of hire (which represented a significant investment packaged as a day's activity reducing the likelihood that using hire bikes would be combined with other significant activities); and the provision of a route plan detailing a simple defined circular route.

In terms of competences, both cycle groups needed the ability to ride and the ability to undertake minor repairs, although for the hire bike users the hire company represented a safety net in the event of mechanical failures. Both groups would also need to be able to navigate, although hire bike users may choose to limit their movements with respect to the basic route plans supplied by some hire centres. Own bike cyclists needed to be able to transport their bikes to the Park. Cycling directly from home was mostly feasible only for local day visitors but for those living around the Park's periphery this initial leg into the Park may not be compatible with the desire for a pleasant recreation experience and would require cycling additional distance beyond the range of some groups of visitors. Hire bike users needed to be able to afford to use the service alongside the ability to reach the hire centres.

Finally, both groups made use of the off-road tracks and to some extent the road network, however for the own bike users the availability of car parking to access the forest trails enabled transport of cycles to their preferred starting point.

Driving

Private vehicles can be seen to support walking and cycling activities in the Park. Private vehicles were also used in different ways to enable the overall visit. For staying visitors, cars were the cheapest mode of travel ignoring the sunk costs of vehicle ownership (Robbins & Dickinson, 2007) and provided a means to carry equipment. Accommodation outside of the two main village centres remains largely inaccessible without the use of private vehicles hence car dependence has changed little for the transit journey. The greatest opportunities to maximise sustainable transport options are offered by accommodation close to village centres whereas visitors staying in large holiday parks on the periphery of the park present the greatest challenges. Cars played a similar supporting role for day visitors many of whom also brought equipment such as cycles or picnic items with certain popular New Forest sites being otherwise inaccessible. The material elements associated with driving included the availability of vehicles, the use of the road network and the free car parking provision. Competences included the ability to navigate, with some visitors identifying how they adapted their routes to avoid traffic congestion with more frequent visitors developing traffic avoidance strategies over time. With respect to meanings, some visits to the Park were opportunistic and made en-route to other destinations or combined with other activities in the vicinity. These visits to the Park still represented a recreation experience with most visitors taking part in typical tourism activities such as walking, visiting cafes and picnic sites. Visitors making the New Forest their principal destination for that day drew positive experiences from the drive through the Forest including the novelty of being held up by

animals roaming into the road and the opportunity for more spontaneous stop-offs. Paradoxically visitors identified the negative aspects of congestion on their visitor experience.

Conclusions

Comparative visitor modal shares indicate that there has been a shift towards walking, cycling and public transport since the National Park's designation in 2005 (Table 4). However, the 2015 survey demonstrates that modal shares require careful interpretation, including the consideration of multi-site and multi-modal visits. A social practices framing of visitor transport use provides for a more contextualised understanding from which it is possible to reflect on the success of existing transport provision and inform further policy intervention. The extent to which walking, cycling and driving practices in their current form are sustainable is dependent on the aspect of sustainability that is addressed.

The Vision is for England's National Parks to be places where low carbon transport and travel are the norm (Defra, 2010). The UK Government called for a "renewed focus on achieving the Parks statutory purposes" and in doing so that they should "ensure they are exemplars in achieving sustainable development" (Defra, 2010, p. 11) which includes emission reductions through sustainable low carbon transport use (Defra, 2010). However, there are limitations to what a countryside provider can influence. While there is scope to improve the material provision at the destination by providing appropriate improved infrastructure informed by a better understanding of visiting practices, there is more limited scope to influence visitor meanings and competences and to influence travel to the destination.

Whilst there is an overarching emphasis on carbon reduction there is also a requirement to remove transport barriers to access and encourage more diversity amongst

visitors. It is evident that policies and initiatives meet the needs of some visitors more than others. From an equity perspective, families with young children gain fewer benefits. The material provision for cycling requires certain competences that lock out groups like families due to ability levels and cost may lock the same group out of public transport use.

Low-carbon transport use in the Park is largely facilitated by cars as this makes sense from a visiting practice perspective. Analysis indicates visitors want to walk and cycle but this is not always feasible and some groups of visitors are locked in to using less sustainable transport modes either by their competence or by material provision as rural sites remain inaccessible to the majority without a car. Therefore it can be argued that car use, albeit reduced wherever possible, has an important role to play as a component of Mobility as a Service (MaaS) for inaccessible locations (Sochor, Karlsson & Strömberg, 2016).

The extent of emissions relates to distance travelled and frequency of visit. Certain groups, such as local dog walkers, generate significant annual mileage given the daily and habitual nature of trips, and low average car occupancy. They will be little influenced by improved cycle facilities and public transport but maybe more impacted by restrictions such as parking restraints or charges.

Whilst tourists travel much further to the National Park relative to daily dog walkers, the social practices approach raises interesting questions regarding their sustainability. The distance travelled is short in comparison to international tourism and this form of tourism maybe more desirable and sustainable than the alternatives if the policy is to reduce the overall carbon footprint of tourism (see for example, Dubois & Ceron, 2006). The frequency of trip is also low and the car occupancy is high at around three, reducing the per capita carbon footprint, and they also have a greater propensity to use alternatives to the car for travel around the Park (Table 3). Furthermore analysis indicates some tourist trips to the New Forest are combined with other trips, itself questioning what share of the emissions from

a multi-purpose trip are appropriately attributed to the holiday trip to the New Forest. However the sustainable practices approach also identifies the limitations to reduce their car use further. The location of 70% of bed spaces inaccessible to public transport services combined with a requirement to carry heavy equipment for many tourists (such as campers) questions whether a much improved and dense public transport network can significantly reduce the 92% share of travel to NFNP by staying visitors.

Understanding of the travel associated with visiting practice is still rudimentary and the social practices approach adopted by this paper aids understanding and provides a theoretical approach to what has been, to date, a largely atheoretical, piecemeal case study approach. Visiting practices have evolved over time based on the system of provision, the visitor competences developed and the meanings associated with visits. These determine how people travel and where people go. Visiting practices are far from homogeneous. Visitors bring diverse competencies and it is clear that some visiting practices are more sustainable than others and transport strategies can be ineffective for some groups of visitors. Group composition influences the scope to utilise sustainable transport options, particularly the presence of young children.

One area where there is scope to reduce car dependency is day visitors to the New Forest National Park. The car share of 78% in 2015 (Table 3) includes visitors with good rail and bus access from surrounding urban conurbations such as Bournemouth and Southampton. Car remains the default option for these visits, however in part due to the lack of barriers for its use, particularly access to widespread free parking in the Park. Analysis has identified this as a group to target for decreased car dependency utilising appropriate infrastructure policies, particularly as there exists facilities for walking and cycling (with capacity to carry cycles on trains). There may be some material constraints on larger family groups making the modal

switch due to increased cost.	Nevertheless 1	this is a segment	with potential	for a more desi	ired
transport future.					

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Table 1 Summary of day visitors by visit frequency (Tourism South East 2004 Visitor Survey)

	Sample size	% by travelling to survey site by car	% of visiting groups with dogs	% visiting site alone	% of adult only groups	% of visits with a duration of 1 hour or less
Visit at least once daily (year-round)	648	88	81	57	91	67
Visit at least twice a week	339	94	67	46	88	52
Visit at least once a week	275	92	48	25	80	34
Visit at least once a fortnight	224	91	32	18	78	32
Visit at least once a month	292	94	23	17	75	28
Less than 12 visits in last 12 months	106	93	18	7	71	25
Less than 6 visits in last 12 months	229	92	19	12	71	27
Only visited once or twice in last 12 months	120	86	23	10	73	33
Not visited in last 12 months	63	86	13	6	71	24

Table 2 Summary of observational research

Base	Date Stay	Length Stay	Group Composition	Main activities
Holburne Bashley Holiday Park	August 2014	7 days	Alone 3 days Son (aged 16) - 2 days Adult friend - 2 days	New Forest Tour. Cycling- forest tracks. Visitor attractions (Reptile Centre & Lymington museum) Key villages (Brockenhurst and Burley), Cycling trip to the Isle of Wight,
Sandy Balls Holiday Park,	May 2015	7 nights	Daughter (aged 12) adult friend plus child (aged 10)	Cycling -forest tracks. Cycling on road, Cycle hire
Shorefields Holiday Park,	August 2015	7 nights	Daughter and friend (both aged 12) Son (aged 17) Two adult friends	New Forest Tour. Cycle hire. Walking. Visits to Bournemouth
Holmsley Campsite	August 2015	4 nights	Alone	Cycling- forest tracks.
Burley (Youth Hostel)	August 2015	1 night	Alone	Local bus services
Bournemouth short stay (Hotel in Bournemouth)	Feb 2016	1 night	Daughter (aged 13)	Cycle hire (half day)
Southampton (AirBnB)	April 2016	2 nights	Adult friend	Urban cycle routes. Rail services).
Roundhills Campsite	May 2016	3 nights	Daughter (aged 13)	Kayaking and Archery at activity centre Cycling (own bike)
Burley (Youth Hostel)	August 2016	6 nights	Alone	Cycling to interview destinations Day visit to Milford on Sea.
Burley (Youth Hostel)	Oct 2016	2 nights	Alone	Cycle – forest tracks New Forest Tour

Table 3 Summary results from 2015 New Forest Visitor Survey

Visit frequency	Day Visitors (n.325)	Staying visitors (n.332) %
every day	14	0
twice a week	7	0
once a week	11	0
once a fortnight	13	0
once a month	20	2
a few times a year	28	28
not visited in the last 12 months	5	44
not visited before	2	25
Travel to accommodation at beginning of stay		
Car, van, motorbike, campervan/motorhome	-	83
Train	-	4
Coach	-	11
Other	-	2
Travel to survey site		
Car, van, motorbike, campervan/motorhome	78	50
Public Transport (train, bus, New Forest Tour)	4	8
Walking	6	16
Cycling	10	16
Minibus, coach, Twizzy, taxi, other	2	10
Average car occupancy	2.9	3.1
Visitor group profiles		
Groups stopping off before visiting the survey site	11	13
Groups visiting somewhere else after the survey site	31	52
Average Group size	3	5
Groups with children	39	38
Groups with children aged five and under	17	10
Groups with dogs	36	23

Table 4 Summary of modal shares to village centres July to mid-September 2004 and 2015

	2004	2015	2004	2015	2004	2015
	Burley Village Centre	Burley Village Centre	Brockenhurst Village Centre	Brockenhurst Village Centre	Lyndhurst Village Centre	Lyndhurst Village Centre
	(n. 91) %	(n. 110) %	(n. 106)	(n.105) %	(n. 119)	(n. 130) %
Car, van, motorbike, campervan/motorhome	82	56	65	50	79	47
Public Transport (train, bus, New Forest Tour)	3	13	7	10	3	10
Walking and Cycling	9	19	28	41	11	26
Minibus, coach, taxi, other	5	12	0	0	8	16

(TSE Visitor Survey 2004 and NFNPA Visitor Survey 2015)

Table 5 Staying visitor modal shares to survey sites (2015 NFNPA Visitor Survey)

Travel to survey site	Staying within the Park boundary %	Staying in towns and villages adjacent to the NFNP %	Staying in urban areas near the NFNPA %
Car, van, motorbike, campervan/motorhome	45	65	48
Public Transport (train, bus, New Forest Tour)	7	7	9
Walking	25	6	0
Cycling	22	13	5
Minibus, coach, taxi, other	1	9	38

X²=102.507, df=8, p=<.001

 Table 6
 Summary of modal shares to survey sites (2015 NFNPA Visitor Survey)

Travel to survey site	Brockenhurst Village Centre (n.105) %	Burley Village Centre (n. 110) %	Lyndhurst Village Centre ¹ (n. 130)	Bolderwood (n. 84) %	Keyhaven (n. 90) %	Lepe (n. 81)	Fritham (n. 35)	Wilverley Plain (n. 21) %
Car, van, motorbike, campervan/motorhome	49	56	47	76	76	100	31	95
Public Transport (train, bus, New Forest Tour)	10	13	10	0	2	0	0	0
Walking	24	6	12	2	9	0	40	0
Cycling	17	13	14	14	13	0	29	5
Minibus, coach, taxi, other	0	12	16	8	0	0	0	0

¹ not 100% due to rounding

X²=131.835, df=15, p=<.001 (excluding Fritham and Wilverley Plain)

Table 7 Summary of modal shares to survey site for adult only groups and groups with children

	Groups with no children (n. 405) %	Groups including children aged 5 and under (n. 90)	Groups including children aged 6 to 15 (n. 112)	Groups with children aged 11-15 (n. 50) %
Car/van/motorhome/motorbike	59	81	77	54
Public Transport	5	8	7	6
Walking	14	7	6	8
Bicycle (hired and own)	15	3	10	23
Other (including minibus and Twizzy and coach)	7	1	1	0
Average Car Occupancy	2.3	3.8 (all groups with children)		

Appendix F

2015 Visitor Survey Descriptive Statistics

New Forest Visitor Survey 2015

1 EXECUTIVE SUMMARY

The 2015 New Forest Visitor Survey has been developed in collaboration with a PhD research project and was undertaken by Research Team EU. The survey follows on from previous annual monitoring of visitors to the National Park. The 2015 survey reflects an increasing focus on transport and incorporates a new approach to capturing visitor travel to provide a more comprehensive understanding of visitor movement and modal choice. This report provides an initial overview of the results of the survey. More detailed analysis will be undertaken as part of the ongoing PhD research project.

The survey identifies visitor profiles in terms of age, group size and presence of dogs. It identifies whether visitors are visiting the New Forest as part of a day trip from home or whether they are visiting as part of their holiday, alongside details of their main activities, dwell time and mode of travel to the survey site.

The New Forest National Park celebrated its tenth anniversary in 2015, during which a number of initiatives aimed at changing how visitors travel to and within the Park have been implemented including the highly visible New Forest Tour. This report therefore includes some results from the 2004/05 (peak period) visitor survey to show how visitor travel has changed over the last ten years. Here are a few headline figures:

50% of visitors surveyed this summer were visiting the New Forest as part of their holiday or stay with friends and relatives, the other 50% were on a day trip from home. This is relatively unchanged from 2004.

Of all the visitors surveyed, 61% were staying within the National Park itself, compared to 55% in 2004. 50% of all visitors staying in the New Forest National Park were camping, either in tents, touring caravans or campervans.

81% of all staying visitors travelled to their accommodation by car, van, campervan or motorbike at the beginning of their stay, compared with 94% in 2004.

78% of day visitors, 47% of staying visitors (43% for those staying in the National Park) arrived at the survey site by private vehicle.

In summer 2015, 50% of visitors surveyed in Brockenhurst Village Centre had arrived in private motor vehicles, compared to 65% in 2004. In Burley, 56% had arrived in private motor vehicles, compared to 82% in 2004. In Lyndhurst, 47% had arrived by private motor vehicle compared to 79% in 2004.

2% of day visitors and 26% of holidaying visitors were visiting the New Forest for the first time.

96% of all visitors rated their visit to the New Forest as either 'High' or 'Very High'.

2 BACKGROUND

New Forest Visitor Surveys

Since 2004, seven in-situ face-to-face surveys of visitors to the New Forest National Park have been commissioned. Five of the surveys were undertaken by Tourism South East, including that forming part of the largest and most extensive study during 2004 and 2005. The 2013 and 2015 surveys were undertaken by Research Team EU.

Table 2.1 Overview of face-to-face surveys

Year	Survey Team	On-site face- to-face interviews	Number interview sites	Interview Locations	Time Frame
2004/ 2005	TSE	3838	68	Locations throughout the New Forest	12 months
2009	TSE	629	4	Bolderwood, Burley, Lymington, Lyndhurst	16th July to 15th October
2010	TSE	787	6	Bolderwood, Burley, Hatchet Pond, Keyhaven, Lymington, Lyndhurst	22nd March and 24th April
2011	TSE	919	6	Bolderwood, Burley, Hatchet Pond, Keyhaven, Lymington, Lyndhurst	September
2013	Research Team EU	595	4	Brockenhurst, Burley, Keyhaven, Lyndhurst	26th August to 14th September
2014	TSE	500	8	Lyndhurst, Brockenhurst, Burley, Keyhaven, Buckler's Hard, Lymington, Ashurst, Hythe	3rd July to 14th September
2015	Research Team EU	657	8	Bolderwood, Burley, Brockenhurst, Fritham, Keyhaven, Lepe, Lyndhurst, Wilverley Plain	10 th July to 13 th September

The 2004/05 TSE study was commissioned by the Countryside Agency prior to issue of the confirmation order designating the New Forest as a national park with consideration that the newly formed New Forest National Park Authority would require "accurate information on visitor numbers, visitor profiles and visit characteristics" in order to fulfil its statutory purposes (Tourism South East (TSE) 2005, p.2).

This study also included onsite observations at 62 locations within the New Forest, manually recording visitor movements alongside direction of travel, number of dogs, whether dogs were on a lead and the presence of children within the group (TSE 2005).

The research objectives of the 2004/05 study have been reproduced below:

- To identify the profile of visitors to the proposed New Forest National Park in terms of visitor type (i.e. local residents, leisure day visitors and staying visitors), age, gender, disability and socio-economic characteristics;
- To explore the characteristics of visits to the proposed New Forest National Park in terms of transport used, activities undertaken and facilities used;

- To identify the main reasons why people visit the New Forest, exploring whether the visit meets their expectations and their perceptions of particular aspects of their visit.
- To gather primary data identifying where people go, what routes and access points are used, and what activities are undertaken at specific locations.
- To produce reliable estimates of visitor volumes and their resultant economic impact based on accurate local information on the characteristics of visits, visitor expenditure and other key information.

TSE 2005

The research objectives of the subsequent TSE visitor surveys of 2009, 2010 and 2011 continue to include the first three objectives identified above whilst adding the additional objectives of monitoring visitor expenditure and awareness of responsible tourism messages.

The 2011 TSE report identifies the following objectives:

- To provide basic data on the profile, origin, behaviour, use of facilities and opinions of visitors to key towns and places of interest in the New Forest;
- To identify the main reasons why visitors come to the New Forest;
- To provide accurate local information on visitor expenditure and characteristics of visits to feed into a local tourism economic impact model (when required);
- To measure awareness of National Park status and key responsible tourism messages being promoted throughout the forest.

TSE 2011

The surveys of 2013 and 2014 have a significantly increased focus with the monitoring of the transport choices and attitudes of visitors representing the main objective of the surveys. Both surveys are undertaken with funding from the Department for Transport's Local Sustainable Transport Fund.

The 2013 survey undertaken by Research EU identifies that "the aim of the visitor surveys is to monitor year-on-year changes in the ratio of car to public transport visits, as well as the desirability of travelling sustainably, and the effectiveness of campaign messages" (Research Team EU 2013, p5).

The 2014 survey "was designed to provide the evidential baseline to assess recent initiatives to encourage greener forms of travel to and around the New Forest" (TSE 2014, p.3).

The New Forest National Park Authority's research objectives for the 2015 visitor survey remains focused on transport behaviour of visitors to the New Forest with the aim of providing for ongoing monitoring of modal shares in respect of the various sustainable transport initiatives being implemented across the Park. The Authority seeks to improve the approach to surveying to ensure that the specific characteristics of the New Forest are provided for within the questioning format.

In summary, the following objectives were identified for the 2015 Visitor Survey:

- 1. To provide a continuing understanding of visitor characteristics, origins and reasons for visiting the New Forest;
- 2. To provide an on-going understanding of travel patterns and modal shares by visitor type;

3. To develop a robust format for ongoing monitoring that is consistent and compatible with other sources of data and information.

Survey Methodology

The existing approach to visitor surveys captures a moment in time during which the visitor is questioned on their visit to one particular site or attraction. The 2004/2005 study identified the average visitor dwell times at sites to be 1.9 hours (TSE 2005) suggesting that the particular activity or visit within the New Forest represents only a fraction of the visitor's day.

This approach presents issues of compatibility with wider methods to identifying the number of 'visitor days' attributable to an area or attraction and does not provide for an understanding of visitor movement around the New Forest.

The 2015 survey continues to provide a breakdown of visitor types and home place origins; group structures and modal shares however the modified format of the survey enables the collection of wider travel information including details of the actual journey origin (e.g. accommodation base) and final destination and details of trip chaining. This additional contextual information provides for a more comprehensive understanding of the transport behaviour and impact of visitors to the New Forest.

A copy of the survey format is attached as Appendix A.

Site Selection Process

Resource limitations require that only a small number of sites are selected for use as visitor interview sites. As such sites were selected with consideration to the individual attributes of the site and use of the site within the previous visitor surveys.

Table 2.2 provides a summary of the sites previously utilised within all of the six visitor surveys. The 2004/2005 included a large range of sites across the New Forest coinciding with on-site observations.

Table 2.2 Overview of face-to-face surveys (2004-2014)

Interview Locations	Number of times used as a survey site
Sandy Balls Holiday Park	1
Lymington Town Centre	5
Lyndhurst Town Centre	6
Brockenhurst village centre	3
Burley village centre	6
Ringwood Town centre	1
Bolderwood	4
Hatchet Pond	2
Keyhaven	5
Ashurst	1
Bucklers Hard	1

In order to provide results which can be compared with previous years, sites which have consistently featured were selected. The three village/town centre sites of Lymington, Lyndhurst and Burley feature most frequently as interview locations. As Lymington lies outside of the National Park boundary this site has been excluded for the purposes of this study.

Further detailed consideration of the attributes of individual sites has been undertaken with the aim of ensuring that the final selected sites reflect a range of New Forest situations particularly in terms of transport provision. This considers the site's proximity to rail transport, the New Forest Tour, scheduled buses, advertised walking and cycling routes.

Lyndhurst and Burley both offer range of transport attributes. Lyndhurst is an interchange for two of the New Forest Tour routes and benefits from an hourly bus service which operates between Southampton and Lymington. This service was subject to rebranding and significant marketing in 2015. The town also offers rainy day activities with the New Forest Centre and shops.

Burley is also on the New Forest Tour and is a hub for cycle hire with popular cycle routes from the village. The village also benefited from the provision of a weekend scheduled bus service over the summer period.

Brockenhurst and Ashurst both benefit from rail access however Ashurst has only featured in one previous survey. Brockenhurst is an interchange for the New Forest Tour and is on the route of the existing scheduled bus service detailed above. Brockenhurst is also an important cycle hire hub within the New Forest.

Keyhaven and Bolderwood both feature in the previous surveys. Keyhaven is on the New Forest Tour but has no other public transport links. The site is distinctive from most New Forest sites being located on the coast and at the very edge of the New Forest National Park boundary. Bolderwood is remote from public transport links but represents a high use site with facilities for visitors including car parking, toilets, and seasonal ranger information service. Seasonal barbeques are also permitted here and it is at the convergence of popular walking and cycling routes. In order to provide for a fuller geographic coverage of the National Park, Fritham and Lepe Country Park were also selected as survey sites.

Survey Time Period

The NFNPA required that the survey was undertaken during the peak summer months coinciding with the seasonal operation of the New Forest Tour (late June to mid-September) and other services. This period overlaps with four of the six previous visitor surveys.

Survey Times

A sample size of a similar scale or bigger to those previously achieved was targeted with a range of dates including weekdays and weekends to be included throughout the period. The 2004/05 TSE study undertook interview sessions between the hours of 1100 and 1600 with a set number of weekdays and weekends (TSE 2005); the 2009, 2010 and 2011 surveyed for five hours between 1100-1700 presumably allowing for breaks within the six hour period. The 2013 and 2014 survey reports do not provide details on the timings of the face-to-face interviews.

To provide for consistency and given that the 1100-1700 time period would seem appropriate to the collection of responses on activities already undertaken and to be undertaken this time period is also proposed for the 2015 visitor survey.

3 VISITOR PROFILE - OVERVIEW

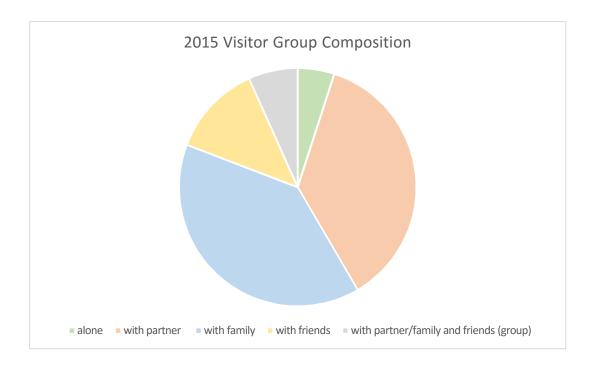
Who are you visiting with today? How many dogs do you have with you?

Visitors were asked who they were visiting with that day and whether they had a dog or dogs with them. 39% of those surveyed were visiting with their family; 36% with their partner, 13% with friends, 7% with a mixed group comprising of family and friends and 5% were visiting on their own.

30% of the visitors surveyed had one or more dogs with them. 44% of those visiting on their own had a dog with them compared to 30% of family groups and 28% of those visiting with their partner.

Table 3.12015 Visitor Group Composition

		all respondents	excl. no answer	respondents with dogs	% of group type with dogs
no answer	17	2.6%		5	29.4%
alone	32	4.9%	5.0%	14	43.8%
with partner	234	35.6%	36.6%	65	27.8%
with family	251	38.2%	39.2%	74	29.5%
with friends	80	12.2%	12.5%	10	12.5%
with partner/family and friends (group)	43	6.5%	6.7%	28	65.1%
Total	657	100%	100%	196	29.8%



Can you provide some details about your group's age range?

Visitors were asked about the age composition of the group they were visiting with that day. A total of 2651 individuals were included within the 657 survey responses.

Table 3.22015 age ranges of visitors

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+
Total People	132	311	292	161	194	375	350	338	498
% of Total	5.0%	11.7%	11.0%	6.1%	7.3%	14.1%	13.2%	12.7%	18.8%

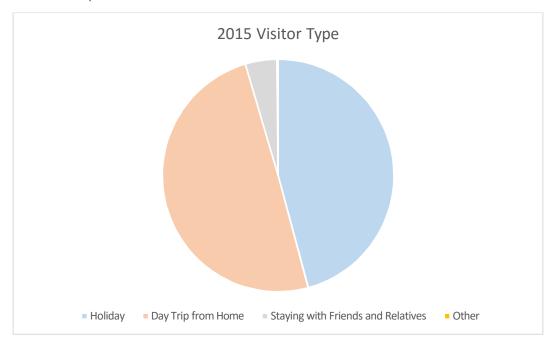
What kind of trip are you on today?

Visitors were asked whether they were at the survey site as part of a day trip from home, as part of their holiday or stay with friends or relatives.

Table 3.3Visitor Type

20	15	2004				
Holiday	301	45.8%				
Staying with Friends and Relatives	29	4.4%	Staying visitor	781	49.4%	
Day Trip from Home	326	49.6%	Day visitor	800	50.6%	
Other*	1	0.2%				
Total	657	100%		1581	100%	

^{*}Educational school trip



4 VISITOR PROFILE — STAYING VISITORS

Where is your accommodation located?

Staying visitors (those on holiday and those staying with friends or relatives) were also asked the location of their accommodation, how many nights they were staying away from home and the type of accommodation they were staying in.

45% of the visitors surveyed were visiting as part of their holiday, of these 60% were staying within the National Park itself.

Table 4.1 Location of accommodation located (On holiday, staying with friends and relatives and 'other')

	20	15	20	04
	Respondents	% of total	Respondents	% of total
Staying in the National Park (within the boundary)	201	61.3%	425	55.4%
Accommodation close to the National Park	54	16.5%	217	27.8%
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	64	19.5%		
(Bournemouth)	43	13.1%		
Staying in other locations (2015)	9	2.7%		
Staying in other locations (2004)			139	17.8%
	328	100%	781	100%



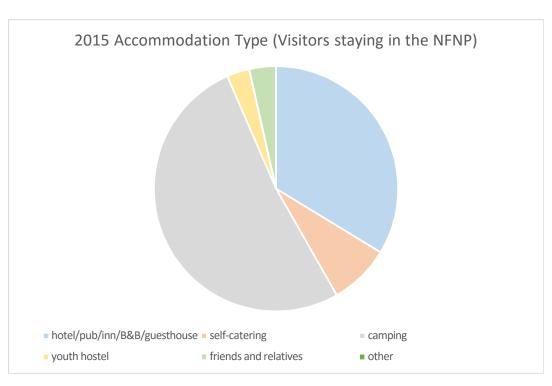
39% of all staying visitors were accommodated within hotels, pubs/inns, bed and breakfasts or guest houses, 38% were camping. A further 10% were staying with friends and relatives (SFR); 10% in self-catering accommodation (including static caravans) and 2% in a Youth Hostel.

61% of all staying visitors surveyed were staying within the New Forest National Park boundary. Over half of those visitors staying within the park were camping either in campervans/motorhomes, caravans or tents.

Table 4.2Accommodation Type

		aying tors	Staying within the NFNP Boundary		Staying around the edge of the NFNP		Staying in nearby urban areas		Staying in other areas	
Hotel	85	26.2%	37	18.6%	6	10.9%	39	60.9%	3	42.9%
Pub/inn	3	0.9%	1	0.5%	0	0.0%	2	3.1%	0	0.0%
B&B/guest house	40	12.3%	29	14.6%	7	12.7%	4	6.3%	0	0.0%
Self-catering house/cottage or flat	29	8.9%	16	8.0%	9	16.4%	4	6.3%	0	0.0%
Campervan	35	10.8%	25	12.6%	8	14.5%	2	3.1%	0	0.0%
Touring caravan	46	14.2%	37	18.6%	6	10.9%	1	1.6%	2	28.6%
Camping (tent)	42	12.9%	41	20.6%	0	0.0%	1	1.6%	0	0.0%
Youth hostel	7	2.2%	6	3.0%	0	0.0%	1	1.6%	0	0.0%
Cabin/static caravan	4	1.2%	0	0.0%	4	7.3%	0	0.0%	0	0.0%
With friends/relatives	32	9.8%	7	3.5%	14	25.5%	9	14.1%	2	28.6%
Other	2	0.6%	0	0.0%	1	1.8%	1	1.6%	0	0.0%
	325	100%	199	100%	55	100%	64	100%	7	100%





How many nights are you staying? (All staying visitors)

Staying visitors were asked how many nights they were staying away from home.

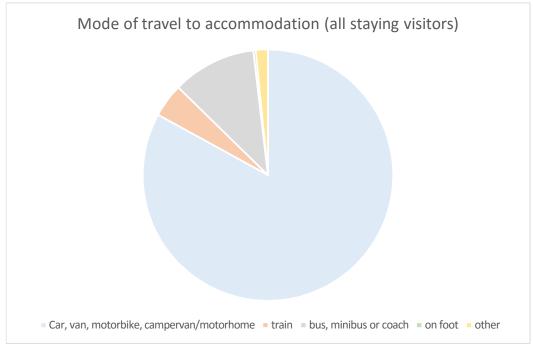
 Table 4.3
 Number of nights staying away from home

Number of nights staying	All staying visitors		Staying in the NFNP		Staying near the NFNP		Staying in urban areas		Staying in other areas	
1	6	1.8%	5	2.5%	1	1.8%	0	0.0%	0	0.0%
2	58	17.8%	36	18.1%	12	21.8%	7	12.3%	3	42.9%
3	62	19.1%	46	23.1%	6	10.9%	8	14.0%	2	28.6%
4	56	17.2%	35	17.6%	6	10.9%	14	24.6%	1	14.3%
5	59	18.2%	32	16.1%	11	20.0%	16	28.1%	0	0.0%
6	22	6.8%	9	4.5%	3	5.5%	10	17.5%	0	0.0%
7	35	10.8%	22	11.1%	11	20.0%	1	1.8%	1	14.3%
More than 7 nights	27	8.3%	14	7.0%	5	9.1%	1	1.8%	0	0.0%
Total	325	100%	199	100%	55	100%	57	100%	7	100%

5 VISITOR TRAVEL

How did you get to your accommodation at the beginning of your stay?

Staying visitors were asked how they travelled to their accommodation at the beginning of their stay. 81% of all staying visitors travelled by car, van, campervan, motorhome or motorbike to get to their accommodation. Of those staying within the National Park boundary, 92% travelled to their accommodation by car, van, campervan, motorhome or motorbike.



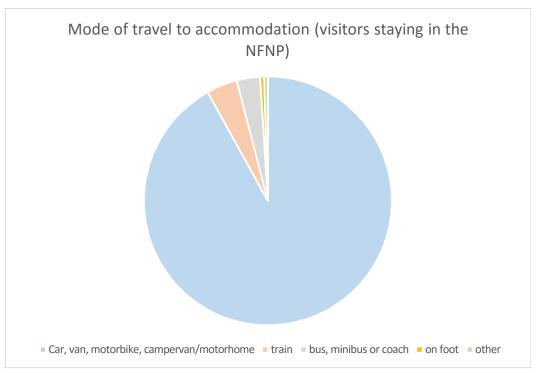


 Table 5.1
 2015 Travel to accommodation at the beginning of their stay

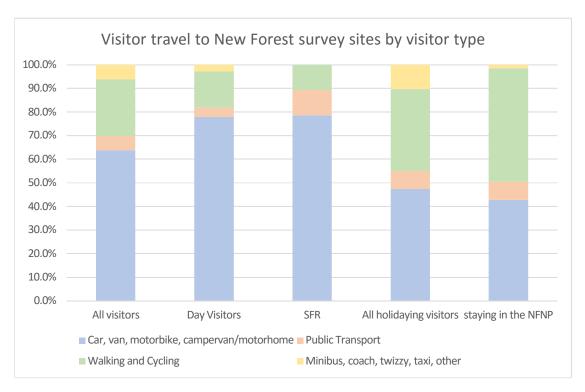
	All stayin	g visitors	, ,	Staying within the NFNP Boundary		Staying around the edge of the NFNP		Staying in nearby urban areas		Staying in other areas	
car or van	232	71.8%	159	80.3%	35	64.8%	33	51.6%	5	71.4%	
train	14	4.3%	8	4.0%	2	3.7%	3	4.7%	1	14.3%	
bus, minibus or coach	35	10.8%	6	3.0%	5	9.3%	24	37.5%	0	0.0%	
campervan/motorhome	35	10.8%	23	11.6%	10	18.5%	2	3.1%	0	0.0%	
motorbike	1	0.3%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	
on foot	1	0.3%	1	0.5%	0	0.0%	0	0.0%	0	0.0%	
other	5	1.5%	1	0.5%	2	3.7%	2	3.1%	0	0.0%	
	323	100%	198	100%	54	100%	64	100%	7	100%	
Car, van, motorbike, campervan/motorhome	268	83.0%	182	91.9%	45	83.3%	35	54.7%	6	85.7%	
no answer for mode	4		2		1		1		0		

 Table 5.2
 2004 Travel to Accommodation at the beginning of their stay

	All stayin	g visitors
Car/van/campervan	734	94.3%
train	7	0.9%
bus, minibus or coach	10	1.3%
Coach (private tour)	14	1.8%
motorbike	2	0.3%
bicycle	4	0.5%
other	7	0.9%
	778	100%
no answer	4	

How did you get to this location today? (By visitor type)

All visitors were asked how they travelled to the survey location. Unlike day visitors, unless they had arrived that day; staying visitors had already travelled to the area. This element of their travel is recorded above in their mode share to their accommodation at the beginning of their stay.



(SFR – Staying with Friends and Relatives)

Table 5.32015 Mode of Travel to Survey Sites (by visitor type)

All locations	All vi	isitors		n a day trip home	Visitors sta friends and		(all accom	n holiday modation ions)	(staying	on holiday in the New tional Park)
car or van	401	61.2%	249	76.4%	22	78.6%	130	43.3%	77	39.7%
train	8	1.2%	5	1.5%	1	3.6%	2	0.7%	1	0.5%
bus: New Forest Tour	14	2.1%	2	0.6%	1	3.6%	11	3.7%	8	4.1%
bus: Forest Bus	12	1.8%	4	1.2%	1	3.6%	7	2.3%	5	2.6%
bus: Forest Bus Baby	2	0.3%	2	0.6%	0	0.0%	0	0.0%	0	0.0%
bus: local bus service	3	0.5%	0	0.0%	0	0.0%	3	1.0%	1	0.5%
minibus	4	0.6%	2	0.6%	0	0.0%	2	0.7%	2	1.0%
coach	34	5.2%	6	1.8%	0	0.0%	27	9.0%	0	0.0%
Twizzy/electric vehicle	1	0.2%	0	0.0%	0	0.0%	1	0.3%	1	0.5%
campervan/motorhome	14	2.1%	3	0.9%	0	0.0%	11	3.7%	6	3.1%
motorbike	3	0.5%	2	0.6%	0	0.0%	1	0.3%	0	0.0%
taxi	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
bicycle: own	66	10.1%	27	8.3%	2	7.1%	37	12.3%	31	16.0%
bicycle: hired	19	2.9%	4	1.2%	0	0.0%	15	5.0%	12	6.2%
on foot	72	11.0%	19	5.8%	1	3.6%	52	17.3%	50	25.8%
other	2	0.3%	1	0.3%	0	0.0%	1	0.3%	0	0.0%
Total	655	100%	326	100%	28	100%	300	100%	194	100%
				Summa	ary					
Car, van, motorbike, campervan/motorhome	418	63.8%	254	77.9%	22	78.6%	142	47.3%	83	42.8%
Public Transport (train, bus: NFT, Forest Bus, Forest Bus Baby	39	6.0%	13	4.0%	3	10.7%	23	7.7%	15	7.7%
Walking and Cycling	157	24.0%	50	15.3%	3	10.7%	104	34.7%	93	47.9%
Minibus, coach, Twizzy, taxi, other	41	6.3%	9	2.8%	0	0.0%	31	10.3%	3	1.5%

If you travelled by car or van, how many vehicles did your group travel in?

Visitors travelling to the survey site by car were asked how many cars their group had travelled in. On average there were three people in each car.

Did you stop off or go anywhere else before you arrived here?

The survey asked whether the visitors had come directly from home or their accommodation or had visited any other places before arriving at the survey site and how they had travelled there. 12% of visiting groups and individuals had visited somewhere else before arriving at the survey site. Of those arriving to the site from 'somewhere else' by non-car modes (on foot, bicycle, bus) over half had undertaken the initial leg of their journey by car.

All of those arriving at the survey sites on hired bikes had initially travelled to the hire centre by car and half of those arriving on their own bikes had undertaken an initial journey by car. Three out of a total of ten arriving by bus had also undertaken an initial leg by car.

Table 5.4 Travel to other sites before arriving at the survey sites

Mode of travel to survey site	Survey respondents	With initial car leg
car or van	46	n/a
campervan/motorhome	1	n/a
coach	1	n/a
other	1	0
bicycle: hired	7	7
bicycle: owned	10	5
on foot	3	2
bus: Forest bus	3	1
bus: Forest Bus Baby	2	1
bus: New Forest Tour	5	1
Total	79	17

Visitors were also asked whether they would be visiting somewhere else before returning home or to their accommodation and if so, how they would be travelling there. 41% of survey respondents intended to visit another location after the survey site.

Of those who had arrived at the survey site by car and intended to travel to another location, 5% intended to travel there without their car (2% on foot, 2% on bike and 1% on the New Forest Tour).

Of those who had arrived at the survey site on the New Forest Tour one person intended to undertake the next leg of their journey on the bus and of those arriving by bus, one person intended to board the New Forest Tour.

Of those arriving at the survey site on foot or by bicycle, 15% intended to undertake the next leg of their journey by car.

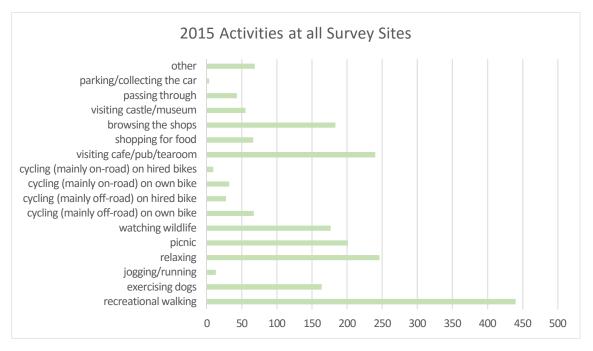
Table 5.5Onward travel from the survey site

		Mode of trave	l to survey site	
Mode of departure	Arrived at survey site by car or van	Arrived at the site on the New Forest Tour	Arrived at site by bus (Forest Bus, Forest Bus Baby, other local bus)	Arrived at site on foot or on bicycle (own and hired)
car or van	139	0	0	8
train	0	0	0	0
bus: New Forest Tour	1	7	1	2
bus: Forest Bus	0	1	9	0
bus: Forest Bus Baby	0	0	2	0
bus: local bus service	0	0	0	1
bicycle: own	2	0	0	24
bicycle: hired	1	0	1	12
on foot	3	0	0	5
other	1	0	0	0
no answer	2	1	0	4
	149	9	13	56

6 VISITOR ACTIVITIES AND SATISFACTION

What have you done/do you plan to do while you are here?

Visitors were asked to select which activities they had been doing or planned to do whilst at the survey site. 67% of all survey respondents stated they had been or intended to undertake a walk for recreational purposes. 'Relaxing' was the second most frequently cited activity (37.4% of respondents), followed by 'visiting a café/pub/tearoom' (36.5% of respondents).



How long do you plan to stay?

Visitors were asked how long they intended to stay at the survey site. 44% of visitors stated that they would stay at the survey site 1-2 hours.

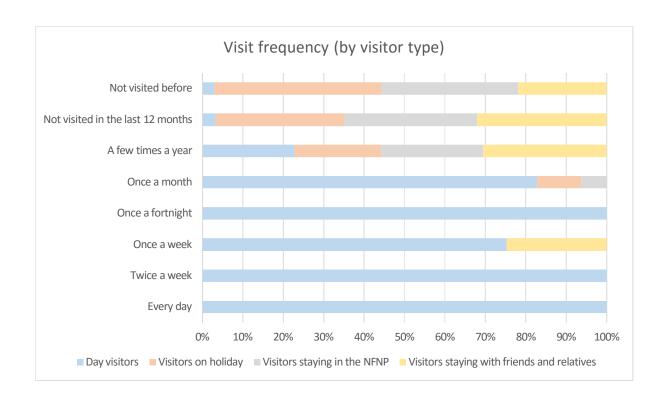


How often do you visit the New Forest National Park?

Visitors were asked how often they visited the New Forest National Park. Day visitors reported to visit most frequently. Less than 2% of day visitors were visiting for the first time on the day of the survey. 26% of visitors on holiday were visiting for the first time (21% of visitors staying within the National Park).

 Table 6.1
 Visit frequency to the New Forest National Park (by visitor type)

	Day visitors		Visitors on holiday			taying with nd Relatives	Visitors staying in the NFNP	
Every day	44	13.6%	0	0.0%	0	0.0%	0	0.0%
Twice a week	24	7.4%	0	0.0%	0	0.0%	0	0.0%
Once a week	34	10.5%	0	0.0%	1	3.4%	0	0.0%
Once a fortnight	43	13.3%	0	0.0%	0	0.0%	0	0.0%
Once a month	66	20.4%	8	2.7%	0	0.0%	3	1.6%
A few times a year	91	28.2%	80	26.8%	11	37.9%	60	31.3%
Not visited in the last 12 months	15	4.6%	133	44.5%	13	44.8%	88	45.8%
Not visited before	6	1.9%	78	26.1%	4	13.8%	41	21.4%
Total	321	100%	299	100%	29	100%	192	100.0%



How would you rate your overall level of enjoyment of the New Forest today?

96% of all visitors rated their overall level of enjoyment of the New Forest that day as either 'very high' or 'high'. Nobody rated their visit as 'poor' or 'very poor'.





7 INDIVIDUAL SURVEY SITE CHARACTERISTICS

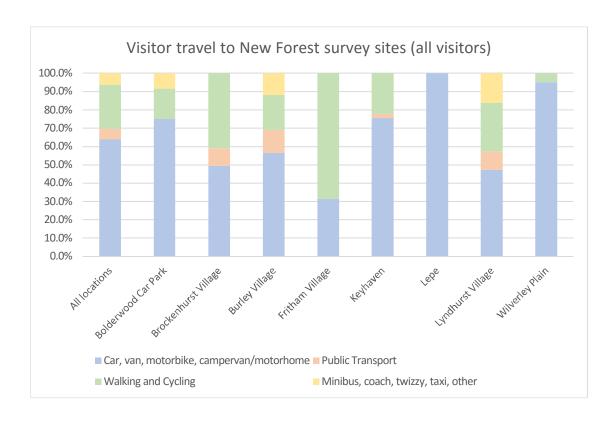
The following tables summarise the responses to the survey on a site by site basis. Table 7.1 provides a summary of the modal shares for all visitor types to each of the survey sites and Table 7.2 provides a comparison with sites surveyed during the same period in 2004.

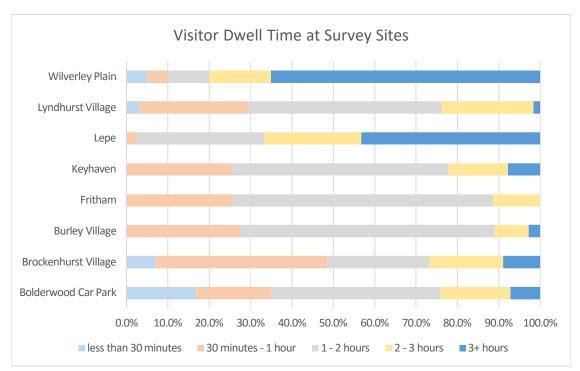
Table 7.12015 Mode of Travel to individual survey sites

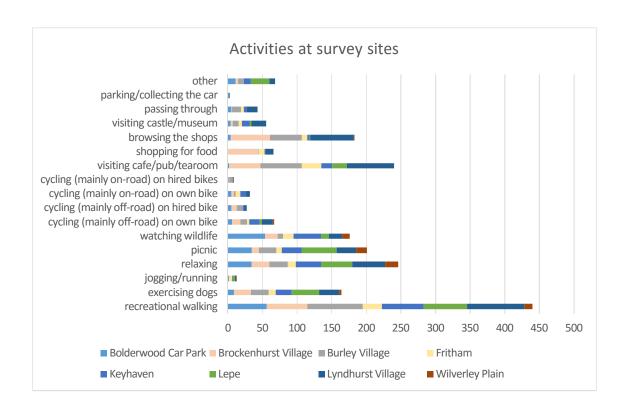
	All Sur	vey Sites		erwood Park		enhurst lage	Burley	Village	Frithar	n Village	Keyl	naven	Le	epe		lhurst lage	Wilver	ley Plain
car or van	401	61.2%	61	72.6%	50	47.6%	58	52.7%	11	31.4%	65	72.2%	80	98.8%	59	45.7%	17	81.0%
train	8	1.2%	0	0.0%	8	7.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
bus: New Forest Tour	14	2.1%	0	0.0%	1	1.0%	3	2.7%	0	0.0%	2	2.2%	0	0.0%	8	6.2%	0	0.0%
bus: Forest Bus	12	1.8%	0	0.0%	1	1.0%	7	6.4%	0	0.0%	0	0.0%	0	0.0%	4	3.1%	0	0.0%
bus: Forest Bus Baby	2	0.3%	0	0.0%	0	0.0%	2	1.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
bus: local bus service	3	0.5%	0	0.0%	0	0.0%	2	1.8%	0	0.0%	0	0.0%	0	0.0%	1	0.8%	0	0.0%
minibus	4	0.6%	4	4.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
coach	34	5.2%	1	1.2%	0	0.0%	12	10.9%	0	0.0%	0	0.0%	0	0.0%	21	16.3%	0	0.0%
Twizzy/electric vehicle	1	0.2%	1	1.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
campervan/ motorhome	14	2.1%	2	2.4%	1	1.0%	2	1.8%	0	0.0%	3	3.3%	1	1.2%	2	1.6%	3	14.3%
motorbike	3	0.5%	0	0.0%	1	1.0%	2	1.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
taxi	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
bicycle: own	66	10.1%	6	7.1%	16	15.2%	8	7.3%	10	28.6%	9	10.0%	0	0.0%	16	12.4%	1	4.8%
bicycle: hired	19	2.9%	6	7.1%	2	1.9%	6	5.5%	0	0.0%	3	3.3%	0	0.0%	2	1.6%	0	0.0%
on foot	72	11.0%	2	2.4%	25	23.8%	7	6.4%	14	40.0%	8	8.9%	0	0.0%	16	12.4%	0	0.0%
other	2	0.3%	1	1.2%	0	0.0%	1	0.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	655	100%	84	100%	105	100%	110	100%	35	100%	90	100%	81	100%	129	100%	21	100%
								Summar	y									
Car, van, motorbike, campervan/ motorhome	418	63.8%	63	75.0%	52	49.5%	62	56.4%	11	31.4%	68	75.6%	81	100.0 %	61	47.3%	20	95.2%
Public Transport (train, bus: NFT, Forest Bus, Forest Bus Baby	39	6.0%	0	0.0%	10	9.5%	14	12.7%	0	0.0%	2	2.2%	0	0.0%	13	10.1%	0	0.0%
Walking and Cycling	157	24.0%	14	16.7%	43	41.0%	21	19.1%	24	68.6%	20	22.2%	0	0.0%	34	26.4%	1	4.8%
Minibus, coach, Twizzy, taxi, other	41	6.3%	7	8.3%	0	0%	13	11.8%	0	0.0%	0	0.0%	0	0.0%	21	16.3%	0	0.0%

Table 7.22015 and 2004 Mode of Travel to survey sites

	В	olderwoo	d Car Pa	rk	В	rockenhu	rst Villag	ge		Burley	Village			Lyndhurs	t Village	
	20)15	20	004	20	15	20	004	20)15	20	004	20	015	20	004
car or van	61	72.6%	24	85.7%	50	47.6%	69	65.1%	58	52.7%	74	81.3%	59	45.7%	94	79%
train	0	0.0%	0	0.0%	8	7.6%	6	5.7%	0	0.0%	0	0.0%	0	0.0%	1	0.8%
bus: New Forest Tour	0	0.0%	N/A	N/A	1	1.0%	N/A	N/A	3	2.7%	N/A	N/A	8	6.2%	N/A	N/A
bus: Forest Bus	0	0.0%	N/A	N/A	1	1.0%	N/A	N/A	7	6.4%	N/A	N/A	4	3.1%	N/A	N/A
bus: Forest Bus Baby	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A	2	1.8%	N/A	N/A	0	0.0%	N/A	N/A
bus: local bus service	0	0.0%	0	0.0%	0	0.0%	1	0.9%	2	1.8%	3	3.3%	1	0.8%	2	1.7%
minibus	4	4.8%	N/A	N/A	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A
coach	1	1.2%	1	3.6%	0	0.0%	0	0.0%	12	10.9%	4	4.4%	21	16.3%	8	6.7%
Twizzy/electric vehicle	1	1.2%	N/A	N/A	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A
campervan/ motorhome	2	2.4%	N/A	N/A	1	1.0%	N/A	N/A	2	1.8%	N/A	N/A	2	1.6%	N/A	N/A
motorbike	0	0.0%	0	0.0%	1	1.0%	0	0.0%	2	1.8%	1	1.1%	0	0.0%	0	0.0%
taxi	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A	0	0.0%	N/A	N/A
bicycle: own	6	7.1%	2	7.1%	16	15.2%	14	13.2%	8	7.3%	7	7.7%	16	12.4%	9	7.6%
bicycle: hired	6	7.1%	2	7.1%	2	1.9%	14	13.2%	6	5.5%	,	7.7%	2	1.6%	9	7.0%
on foot	2	2.4%	0	0.0%	25	23.8%	16	15.1%	7	6.4%	1	1.1%	16	12.4%	4	3.4%
other	1	1.2%	1	3.6%	0	0.0%	0	0.0%	1	0.9%	1	1.1%	0	0.0%	1	0.8%
Total	84	100%	28	100%	105	100%	106	100%	110	100%	91	100%	129	100%	119	100%
							Summar	у								
Car, van, motorbike, campervan/motorhome	63	75.0%	24	85.7%	52	49.5%	69	65.1%	62	56.4%	75	82.4%	61	47.3%	94	79%
Public Transport (train, bus: NFT, Forest Bus, Forest Bus Baby	0	0.0%	0	0.0%	10	9.5%	7	6.6%	14	12.7%	3	3.3%	13	10.1%	3	2.5%
Walking and Cycling	14	16.7%	2	7.1%	43	41.0%	30	28.3%	21	19.1%	8	8.8%	34	26.4%	13	11%
Minibus, coach, Twizzy, taxi, other	7	8.3%	2	7.2%	0	0%	0	0.0%	0	0.0%	1	5.5%	21	16.3%	9	7.5%







Bolderwood

 Table 7.3
 Summary of survey responses at Bolderwood

Date of Survey	Number of responses
Wednesday 15 th July	23
Saturday 1 st August	15
Monday 3rd August	21
Saturday 5 th September	25
Total	84

Table 7.42015 Visitor Group Composition at Bolderwood

		all respondents	excl. no answer	respondents with dogs
no answer	1	1.2%		
alone	5	6.0%	6.0%	3
with partner	21	25.0%	25.3%	4
with family	40	47.6%	48.2%	5
with friends	17	20.2%	20.5%	0
with partner/family and friends (group)	0	0.0%	0.0%	0
Total	84	100.0%	100.0%	12

Table 7.52015 age ranges of visitors at Bolderwood

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	20	75	24	23	52	30	83	35	30	372
% of Total	5.4%	20.2%	6.5%	6.2%	14.0%	8.1%	22.3%	9.4%	8.1%	100%

Table 7.6Visitor Types at Bolderwood

	Respondents	% of total
Holiday	35	41.7%
Day Trip from Home	46	54.8%
Staying with Friends and Relatives	2	2.4%
Other	1	1.2%
Total	84	100%

Table 7.7 Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015				
	Respondents	% of total			
Staying in the National Park (within the boundary)	27	73%			
Accommodation close to the National Park	5	14%			
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	3	8%			
Staying in other locations	2	5%			
Total	37	100%			

 Table 7.8
 Activities at Bolderwood

Activity	Count
recreational walking	56
exercising dogs	9
jogging/running	1
relaxing	34
picnic	35
watching wildlife	54
cycling (mainly off-road) on own bike	6
cycling (mainly off-road) on hired bike	5
cycling (mainly on-road) on own bike	5
cycling (mainly on-road) on hired bikes	1
visiting cafe/pub/tearoom	2
shopping for food	0
browsing the shops	4
visiting castle/museum	4
passing through	5
parking/collecting the car	2
other	11

Table 7.9Dwell time at Bolderwood

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	
Respondents	14	15	34	14	6	83
Percentage	17%	18%	41%	17%	7%	100%

 Table 7.10
 Frequency of visit to the New Forest NP (visitors at Bolderwood)

	Respondents	% of Total
Every day	2	2%
Twice a week	6	7%
Once a week	5	6%
Once a fortnight	5	6%
Once a month	6	7%
A few times a year	31	37%
Not visited in the last 12 months	19	23%
Not visited before	10	12%
	84	100%

 Table 7.11
 Stops before arriving at Bolderwood

	Respondents
Came from somewhere else	23
Came directly from home	37
Came directly from holiday accommodation/friends and relatives house	24
Total	84

 Table 7.12
 Location of stops before arriving at Bolderwood

Miscellaneous	1
Bashley Lakes	1
Burley	9
Lyndhurst	4
Rufus Stone	1
Whitefield Moor	1
Moyles Court	1
Reptile Centre	2
Brockenhurst	1
Blackwater	1
Bournemouth Airport	1
Janesmoor Car Park	1
Sway	1

 Table 7.13
 Planned stops following visit to Bolderwood

	Respondents
Back home	19
Back to accommodation	9
somewhere else	56
no answer	
Total	
Most frequent planned stops:	
Lyndhurst	8
Burley	7
Undecided	6
pub/café	4
Shops	3
Romsey	2
Cycling around	2
Reptile Centre	2

Brockenhurst

 Table 7.14
 Summary of survey responses at Brockenhurst

Date of Survey	Number of responses
Wednesday 15th July	21
Monday 20th July	27
Thursday 6th August	15
Friday 14th August	12
Saturday 15th August	12
Friday 28th August	8
Sunday 13th September	10
Total	105

 Table 7.15
 2015 Visitor Group Composition at Brockenhurst

		all respondents	excl. no answer	respondents with dogs
no answer	3	2.9%		1
alone	2	1.9%	2.0%	0
with partner	43	41.0%	42.2%	12
with family	52	49.5%	51.0%	13
with friends	2	1.9%	2.0%	1
with partner/family and friends (group)	3	2.9%	2.9%	5
Total	105	100.0%	100.0%	32

Table 7.162015 age ranges of visitors at Brockenhurst

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	20	27	29	17	32	42	52	49	60	328
% of Total	6.1%	8.2%	8.8%	5.2%	9.8%	12.8%	15.9%	14.9%	18.3%	100%

 Table 7.17
 Visitor Types at Brockenhurst

	Respondents	% of total
Holiday	84	80.0%
Day Trip from Home	17	16.2%
Staying with Friends and Relatives	4	3.8%
Other	0	0.0%
Total	105	100.0%

Table 7.18 Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	63	72%	
Accommodation close to the National Park	17	19%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	6	7%	
Staying in other locations	2	2%	
Total	88	100%	

 Table 7.19
 Activities at Brockenhurst

Activity	Count
recreational walking	59
exercising dogs	24
jogging/running	0
relaxing	26
picnic	10
watching wildlife	18
cycling (mainly off-road) on own bike	12
cycling (mainly off-road) on hired bike	8
cycling (mainly on-road) on own bike	4
cycling (mainly on-road) on hired bikes	1
visiting cafe/pub/tearoom	45
shopping for food	44
browsing the shops	57
visiting castle/museum	3
passing through	1
parking/collecting the car	0
other	4

Table 7.20Dwell time at Brockenhurst

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	
Respondents	7	42	25	18	9	101
Percentage	7%	42%	25%	18%	9%	100%

 Table 7.21
 Frequency of visit to the New Forest NP (visitors at Brockenhurst)

	Respondents	% of Total
Every day	0	0%
Twice a week	1	1%
Once a week	0	0%
Once a fortnight	1	1%
Once a month	4	4%
A few times a year	42	40%
Not visited in the last 12 months	40	38%
Not visited before	17	16%
	105	100%

 Table 7.22
 Stops before arriving at Brockenhurst

	Respondents
Came from somewhere else	71
Came directly from home	15
Came directly from holiday accommodation/friends and relatives house	19
Total	105

 Table 7.23
 Location of stops before arriving at Brockenhurst

Lyndhurst	8
Milford on Sea	1
walk in the forest first	1
cycling at Roundhills	1
Lymington	2
Burley	2
Bank	2
Winsor	1
Lymington Pier	1
	19

 Table 7.24
 Planned stops following visit to Brockenhurst

	Respondents
Back home	14
Back to accommodation	55
somewhere else	36
no answer	
Total	105
Most frequent planned stops:	
Not sure/walking somewhere	6
Lymington	5
Beaulieu	3
somewhere else in Brockenhurst/pub	3
Lyndhurst	2
Bank	2
Drive/motorbike around	2
Bolderwood	2
Burley	2
Reptile Centre	2

Burley

 Table 7.25
 Summary of survey responses at Burley

Date of Survey	Number of responses
Sunday 12th July	24
Sunday 2nd August	21
Monday 3rd August	18
Thursday 13th August	22
Friday 14th August	8
Sunday 30th August	18
Sunday 12th July	24
Total	111

Table 7.262015 Visitor Group Composition at Burley

no answer	4	all respondents 3.6%	excl. no answer	respondents with dogs
alone	4	3.6%	3.7%	3
with partner	43	38.7%	40.2%	14
with family	35	31.5%	32.7%	12
with friends	18	16.2%	16.8%	1
with partner/family and friends (group)	7	6.3%	6.5%	0
Total	111	100.0%	100.0%	32

Table 7.272015 age ranges of visitors at Burley

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	9	52	140	80	22	70	67	39	49	528
% of Total	1.7%	9.8%	26.5%	15.2%	4.2%	13.3%	12.7%	7.4%	9.3%	100%

Table 7.28Visitor Types at Burley

	Respondents	% of total
Holiday	64	57.7%
Day Trip from Home	46	41.4%
Staying with Friends and Relatives	1	0.9%
Other	0	0.0%
Total	111	100%

Table 7.29 Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	30	46%	
Accommodation close to the National Park	5	8%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	28	43%	
Staying in other locations	2	3%	
Total	65	100%	

Table 7.30Activities at Burley

Activity	Count
recreational walking	80
exercising dogs	26
jogging/running	1
relaxing	27
picnic	25
watching wildlife	8
cycling (mainly off-road) on own bike	10
cycling (mainly off-road) on hired bike	9
cycling (mainly on-road) on own bike	2
cycling (mainly on-road) on hired bikes	5
visiting cafe/pub/tearoom	60
shopping for food	1
browsing the shops	46
visiting castle/museum	9
passing through	13
parking/collecting the car	0
other	8

Table 7.31Dwell time at Burley

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	Total
Respondents	0	30	67	9	3	109
Percentage	0%	28%	61%	8%	3%	100%

 Table 7.32
 Frequency of visit to the New Forest NP (visitors at Burley)

	Respondents	% of Total
Every day	3	3%
Twice a week	2	2%
Once a week	4	4%
Once a fortnight	7	6%
Once a month	16	15%
A few times a year	31	28%
Not visited in the last 12 months	26	24%
Not visited before	20	18%
Total	109	100%

 Table 7.33
 Stops before arriving at Burley

	Respondents
Came from somewhere else	62
Came directly from home	39
Came directly from holiday accommodation/friends and relatives house	10
Total	111

 Table 7.34
 Location of stops before arriving at Burley

Driving around the Forest	1
Ashurst	2
Beaulieu	2
Ringwood	1
Lyndhurst	1
Wilverley Plain	1
Salisbury	1
Winbourne Market	1

 Table 7.35
 Planned stops following visit to Burley

	Respondents
Back home	26
Back to accommodation	26
somewhere else	59
no answer	0
Total	
Most frequent planned stops:	
Beaulieu/Motor Museum	11
Lyndhurst	9
Keyhaven	6
Brockenhurst	5
Cycling in the Forest	4

New Forest Show	3
For a coffee/to the pub	2
Bolderwood	2
New Milton	2
Not decided	2

Fritham

 Table 7.36
 Summary of survey responses at Fritham

Date of Survey	Number of responses
Wednesday 29th July	10
Wednesday 19th August	10
Thursday 3rd September	15
Total	35

 Table 7.37
 2015 Visitor Group Composition at Fritham

		all respondents	excl. no answer	respondents with dogs
no answer	0	0.0%		0
alone	3	8.6%	8.6%	0
with partner	22	62.9%	62.9%	4
with family	3	8.6%	8.6%	3
with friends	3	8.6%	8.6%	3
with partner/family and friends (group)	4	11.4%	11.4%	0
Total	35	100.0%	100.0%	10

Table 7.382015 age ranges of visitors at Fritham

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	8	0	0	0	0	8	3	6	75	100
% of Total	8.0%	0.0%	0.0%	0.0%	0.0%	8.0%	3.0%	6.0%	75.0%	100%

Table 7.39Visitor Types at Fritham

	Respondents	% of total
Holiday	11	31.4%
Day Trip from Home	24	68.6%
Staying with Friends and Relatives	0	0.0%
Other	0	0.0%
Total	35	100.0%

Table 7.40 Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	7	78%	
Accommodation close to the National Park	0	0%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	2	22%	
Staying in other locations	0	0%	
Total	9	100%	

Table 7.41Activities at Fritham

Activity	Count
recreational walking	28
exercising dogs	10
jogging/running	4
relaxing	11
picnic	8
watching wildlife	15
cycling (mainly off-road) on own bike	3
cycling (mainly off-road) on hired bike	0
cycling (mainly on-road) on own bike	7
cycling (mainly on-road) on hired bikes	0
visiting cafe/pub/tearoom	28
shopping for food	8
browsing the shops	8
visiting castle/museum	4
passing through	4
parking/collecting the car	0
other	0

Table 7.42Dwell time at Fritham

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	Total
Respondents	0	9	22	4	0	35
Percentage	0%	26%	63%	11%	0%	100%

 Table 7.43
 Frequency of visit to the New Forest NP (visitors at Fritham)

	Respondents	% of Total
Every day	17	50%
Twice a week	0	0%
Once a week	0	0%
Once a fortnight	0	0%
Once a month	12	35%
A few times a year	0	0%
Not visited in the last 12 months	5	15%
Not visited before	0	0%
Total	34	100%

 Table 7.44
 Stops before arriving at Fritham

Came from somewhere else	11
Came directly from home	24
Came directly from holiday accommodation/friends and relatives house	0
Total	35

 Table 7.45
 Planned stops following visit to Fritham

Back home	24
Back to accommodation	11
somewhere else	0
no answer	0
Total	35

Keyhaven

 Table 7.46
 Summary of survey responses at Keyhaven

Date of Survey	Number of responses
Sunday 12th July	21
Sunday 9th August	20
Wednesday 19th August	19
Wednesday 2nd September	30
Total	90

 Table 7.47
 2015 Visitor Group Composition at Keyhaven

		all respondents	excl. no answer	respondents with dogs
no answer	3	3.3%		1
alone	8	8.9%	9.2%	5
with partner	28	31.1%	32.2%	6
with family	32	35.6%	36.8%	10
with friends	15	16.7%	17.2%	3
with partner/family and friends (group)	4	4.4%	4.6%	0
Total	90	100.0%	100.0%	25

Table 7.482015 age ranges of visitors at Keyhaven

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	8	31	20	10	31	62	42	22	49	275
% of Total	2.9%	11.3%	7.3%	3.6%	11.3%	22.5%	15.3%	8.0%	17.8%	100%

Table 7.49Visitor Types at Keyhaven

	Respondents	% of total
Holiday	22	24.4%
Day Trip from Home	60	66.7%
Staying with Friends and Relatives	8	8.9%
Other	0	0.0%
Total	90	100.0%

Table 7.50Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	20	67%	
Accommodation close to the National Park	7	23%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	3	10%	
Staying in other locations	0	0%	
Total	30	100%	

Table 7.51Activities at Keyhaven

Activity	Count
recreational walking	60
exercising dogs	23
jogging/running	1
relaxing	37
picnic	29
watching wildlife	40
cycling (mainly off-road) on own bike	15
cycling (mainly off-road) on hired bike	2
cycling (mainly on-road) on own bike	8
cycling (mainly on-road) on hired bikes	1
visiting cafe/pub/tearoom	16
shopping for food	1
browsing the shops	3
visiting castle/museum	12
passing through	4
parking/collecting the car	0
other	10

Table 7.52Dwell time at Keyhaven

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	Total
Respondents	0	23	47	13	7	90
Percentage	0%	26%	52%	14%	8%	100%

 Table 7.53
 Frequency of visit to the New Forest NP (visitors at Keyhaven)

	Respondents	% of Total
Every day	11	12%
Twice a week	9	10%
Once a week	12	13%
Once a fortnight	10	11%
Once a month	11	12%
A few times a year	17	19%
Not visited in the last 12 months	13	14%
Not visited before	7	8%
Total	90	100%

 Table 7.54
 Stops before arriving at Keyhaven

Came from somewhere else	30
Came directly from home	55
Came directly from holiday accommodation/friends and relatives house	5
Total	90

 Table 7.55
 Location of stops before arriving at Keyhaven

Around the Forest on bike	1
Milford on Sea	1
Barton on Sea	1
Ringwood Brewery	1
Lymington	1

 Table 7.56
 Planned stops following visit to Keyhaven

	Respondents
Back home	45
Back to accommodation	15
somewhere else	30
no answer	0
Total	90
Most frequent planned stops:	
New Milton	3
Beaulieu/Motor Museum	3
Lyndhurst	3
Burley	3
undecided	2
Lymington	2

Lepe Country Park

 Table 7.57
 Summary of survey responses at Lepe

Date of Survey	Number of responses
Wednesday 26 th July	14
Saturday 1 st August	24
Saturday 8 th August	16
Sunday 23 rd August	27
Total	81

Table 7.582015 Visitor Group Composition

		all respondents	excl. no answer	respondents with dogs
no answer	2	2.5%		
alone	2	2.5%	2.5%	1
with partner	13	16.0%	16.5%	11
with family	43	53.1%	54.4%	18
with friends	5	6.2%	6.3%	2
with partner/family and friends (group)	16	19.8%	20.3%	19
Total	81	100.0%	100.0%	51

Table 7.592015 age ranges of visitors (Lepe only)

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total	52	72	5	6	8	82	35	30	34	324
People										
% of	16.0%	22.2%	1.5%	1.9%	2.5%	25.3%	10.8%	9.3%	10.5%	100%
Total										

Table 7.60Visitor Type

	Respondents	% of total
Holiday	12	14.8%
Day Trip from Home	62	76.5%
Staying with Friends and Relatives	7	8.6%
Total	81	100.0%

Table 7.61Location of accommodation (on holiday, staying with friends and relatives
and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	8	44.4%	
Accommodation close to the National Park	5	27.8%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	4	22.2%	
Staying in other locations	1	5.6%	
	18	100%	

Table 7.62Activities at Lepe survey site

Activity	Count
recreational walking	63
exercising dogs	40
jogging/running	3
relaxing	45
picnic	50
watching wildlife	11
cycling (mainly off-road) on own bike	3
cycling (mainly off-road) on hired bike	0
cycling (mainly on-road) on own bike	0
cycling (mainly on-road) on hired bikes	0
visiting cafe/pub/tearoom	21
shopping for food	0
browsing the shops	1
visiting castle/museum	2
passing through	0
parking/collecting the car	0
other (see below)	27
Playing games including ball games	23
Flying kites	6
Swimming/beach/fishing	6
Playground/play area	10

 Table 7.63
 Dwell time at Lepe Country Park

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	
Respondents	0	2	25	19	35	81
Percentage	0.0%	2.5%	30.9%	23.5%	43.2%	100%

 Table 7.64
 Frequency of visit to the New Forest NP (visitors at Lepe)

	Respondents	% of Total
Every day	3	3.7%
Twice a week	2	2.5%
Once a week	7	8.6%
Once a fortnight	12	14.8%
Once a month	8	9.9%
A few times a year	33	40.7%
Not visited in the last 12 months	13	16.0%
Not visited before	3	3.7%
	81	100.0%

Table 7.65Stops before arriving at Lepe Country Park

Came from somewhere else	0
Came directly from home	62
Came directly from holiday accommodation/friends and relatives house	19
Total	81

 Table 7.66
 Planned stops following visit to Lepe Country Park

	Responses
Back home	53
Back to accommodation	14
somewhere else	12
no answer	2
Total	81
Planned next stops:	
Stop at a pub on the way home	3
Exbury Gardens	1
Brockenhurst	1
Lyndhurst	1
Bucklers Hard	1
Not sure will decide later	1
no answer	4

Lyndhurst

 Table 7.67
 Summary of survey responses at Lyndhurst

Date of Survey	Number of responses
Friday 10th July	29
Sunday 2nd August	16
Saturday 15th August	30
Saturday 22nd August	13
Saturday 29th August	13
Sunday 13th September	29
Total	130

 Table 7.68
 2015 Visitor Group Composition at Lyndhurst

		all respondents	excl. no answer	respondents with dogs
no answer	4	3.1%		1
alone	7	5.4%	5.6%	2
with partner	59	45.4%	46.8%	14
with family	36	27.7%	28.6%	10
with friends	17	13.1%	13.5%	0
with partner/family and friends (group)	7	5.4%	5.6%	4
Total	130	100.0%	100.0%	31

Table 7.692015 age ranges of visitors at Lyndhurst

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	15	34	62	8	35	61	45	141	201	602
% of Total	2.5%	5.6%	10.3%	1.3%	5.8%	10.1%	7.5%	23.4%	33.4%	100%

Table 7.70Visitor Types at Lyndhurst

	Respondents	% of total
Holiday	68	52.3%
Day Trip from Home	56	43.1%
Staying with Friends and Relatives	6	4.6%
Other	0	0.0%
Total	130	100.0%

Table 7.71 Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	42	57%	
Accommodation close to the National Park	12	16%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	19	26%	
Staying in other locations	1	1%	
Total	74	100%	

Table 7.72Activities at Lyndhurst

Activity	Count
recreational walking	82
exercising dogs	29
jogging/running	2
relaxing	47
picnic	28
watching wildlife	19
cycling (mainly off-road) on own bike	16
cycling (mainly off-road) on hired bike	3
cycling (mainly on-road) on own bike	6
cycling (mainly on-road) on hired bikes	0

visiting cafe/pub/tearoom	68
shopping for food	12
browsing the shops	63
visiting castle/museum	21
passing through	16
parking/collecting the car	1
other	8

Table 7.73Dwell time at Lyndhurst

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	Total
Respondents	4	33	59	28	2	126
Percentage	3%	26%	47%	22%	2%	100%

 Table 7.74
 Frequency of visit to the New Forest NP (visitors at Lyndhurst)

	Respondents	% of Total
Every day	7	5%
Twice a week	4	3%
Once a week	4	3%
Once a fortnight	7	5%
Once a month	14	11%
A few times a year	18	14%
Not visited in the last 12 months	44	34%
Not visited before	30	23%
Total	128	100%

 Table 7.75
 Stops before arriving at Lyndhurst

	Respondents
Came from somewhere else	57
Came directly from home	54
Came directly from holiday accommodation/friends and relatives house	19
Total	130

 Table 7.76
 Location of stops before arriving at Lyndhurst

Brockenhurst	6
New Forest Tour	2
Burley	2
Ringwood	2
Route through the Forest	2
New Forest Wildlife Park	1
Southampton	1
Cadman	1
Longdown Activity Farm	1
Lymington	1

 Table 7.77
 Planned stops following visit to Lyndhurst

		Respondents
Back home		39
Back to accommodation		18
somewhere else		71
Total		128
Most f	requent planned stops:	
	Beaulieu	11
	Bucklers Hard	11
	Brockenhurst	6
	Still deciding	6
	Ringwood	6
	Lymington	4
	Burley	4
	NFT	3
	Bolderwood	3
	Keyhaven	2
	pubs	2
	Walk/cycle nearby	2

Wilverley Plain

 Table 7.78
 Summary of survey responses at Wilverley Plain

Date of Survey	Number of responses
Saturday 29 th August	21
Total	21

 Table 7.79
 2015 Visitor Group Composition at Wilverley Plain

		all respondents	excl. no answer	respondents with dogs
no answer	0	0.0%		
alone	1	5.0%	5.0%	0
with partner	5	25.0%	25.0%	0
with family	9	45.0%	45.0%	3
with friends	3	15.0%	15.0%	0
with partner/family and friends (group)	2	10.0%	10.0%	0
Total	20	100%	100%	3

 Table 7.80
 2015 age ranges of visitors at Wilverley Plain

Age Group	under 5	6 to 10	11 to 15	16 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	Total
Total People	0	20	12	17	14	20	23	16	0	122
% of Total	0.0%	16.4%	9.8%	13.9%	11.5%	16.4%	18.9%	13.1%	0.0%	100%

 Table 7.81
 Visitor Types at Wilverley Plain

	Respondents	% of total
Holiday	6	28.6%
Day Trip from Home	14	66.7%
Staying with Friends and Relatives	1	4.8%
Other	0	0.0%
Total	21	100%

Table 7.82 Location of accommodation (on holiday, staying with friends and relatives and 'other')

	2015		
	Respondents	% of total	
Staying in the National Park (within the boundary)	3	43%	
Accommodation close to the National Park	4	57%	
Staying in urban areas near the NFNPA (Christchurch, Wimborne, Bournemouth, Southampton or Salisbury)	0	0%	
Staying in other locations	0	0%	
Total	7	100%	

 Table 7.83
 Activities at Wilverley Plain

Activity	Count
recreational walking	12
exercising dogs	3
jogging/running	1
relaxing	19
picnic	16
watching wildlife	11
cycling (mainly off-road) on own bike	2
cycling (mainly off-road) on hired bike	0
cycling (mainly on-road) on own bike	0
cycling (mainly on-road) on hired bikes	1
visiting cafe/pub/tearoom	0
shopping for food	0
browsing the shops	1
visiting castle/museum	0
passing through	0
parking/collecting the car	0
other	0

 Table 7.84
 Dwell time at Wilverley Plain

	less than 30 minutes	30 minutes - 1 hour	1 - 2 hours	2 - 3 hours	3+ hours	Total
Respondents	1	1	2	3	13	20
Percentage	5%	5%	10%	15%	65%	100%

 Table 7.85
 Frequency of visit to the New Forest NP (visitors at Wilverley Plain)

	Respondents	% of Total
Every day	1	5%
Twice a week	0	0%
Once a week	3	14%
Once a fortnight	1	5%
Once a month	3	14%
A few times a year	11	52%
Not visited in the last 12 months	1	5%
Not visited before	1	5%
Total	21	100%

 Table 7.86
 Stops before arriving at Wilverley Plain

Came from somewhere else	6
Came directly from home	13
Came directly from holiday accommodation/friends and relatives house	2
Total	21

 Table 7.87
 Location of stops before arriving at Wilverley Plain

Burley	2
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 Table 7.88
 Planned stops following visit to Wilverley Plain

Back home	11
Back to accommodation	2
somewhere else	8
Total	
Most frequent planned stops:	
Brockenhurst	4
Burley	4