The potential for sustainable tourism along the proposed
Three Rivers Way multi-purpose route on the Norfolk Broads

by
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Thesis presented in part-fulfilment of the degree of Master of Science in
accordance with the regulations of the University of East Anglia

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August 2009

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Abstract

The tourism industry, one of the largest service sectors in the world market, has a highly influential presence in the efforts of a global move towards sustainable development (E.U. Committee of the Regions, 2006). As sustainable tourism aims to recognise and manage the variety of negative environmental and socio-economic impacts resulting from the consumption of tourism products, it works towards finding a way to allow the tourism market to operate sustainably (Lindberg et al., 1997). The emergence of sustainable tourism, through the increasing awareness for environmental issues and the development of a sustainable future, has led to a variety of bottom-up initiatives by local organisations for the development of sustainable tourism products and practices. One such organisation is the Three Rivers Way Association (3RWA) that has proposed a 7.5 mile multi-purpose route named the Three Rivers Way (3RW), which aims “to link villages on the Northern Broads rivers (Hoveton, Horning, Ludham and Potter Heigham) with a safe, pleasant route for walkers, cyclists and those with mobility problems” (3RWA, 2009). This study aims to assess the potential for sustainable tourism in this area of the Norfolk Broads, following the development of the 3RW, through the distribution of questionnaires used to assess the views of the three main stakeholder groups: businesses, residents and visitors. The main findings showed that there would be a positive impact upon the businesses in the area, particularly through a potential increase in customer numbers. The residents in the area are supportive the route, the majority stating that they believe an increase in tourism would be positive. There is a high demand for walking facilities in the area and if a route such as the 3RW were available, it would increase the frequency of visits by tourists to the area, as well as recreational tourism by local residents. However, in order to successfully achieve and maintain sustainable tourism not only the activities conducted on the route should be sustainable, but also that the actions surrounding these activities, for example, sustainable transportation used to get to and from the location of the 3RW.
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Acknowledgements

I would like to thank, first and foremost, the Three Rivers Way Association for giving me the opportunity to work with them on this project. Dr. Dick Cobb, my supervisor, for guiding me throughout the project at its various stages and always giving helpful feedback. Many thanks go to Marie Prebble, Hannah Newton and Jenny Hodbod for being my trustworthy field assistants by helping me distribute the questionnaires. Last but not least, I would like to thank my parents for their support; without them none of this would have been possible.
1. Introduction

The principles of sustainable development are increasingly being incorporated into the various sectors of society, including tourism. Being one of the largest service industries worldwide, tourism has a great influence on the advancement of sustainable development as it can cause a variety of negative environmental and socio-economic impacts (E.U. Committee of the Regions, 2006; Keyser, 2002; Budeanu, 2007). Following the widespread recognition of the relationship between sustainable development and tourism, emerged the concept of sustainable tourism. Sustainable tourism aims to recognise and manage these potential negative impacts to work towards finding a way to allow the tourism industry, whatever the destination or location, to sustainably continue (Lindberg et al., 1997). The focus of sustainable tourism is increasingly becoming a priority in the U.K., which has resulted in many local, bottom-up initiatives.

The transportation sector is an important aspect of the tourism industry due to the variety of environmental and socio-economic impacts that it can cause. One of the most active groups working in the sector of sustainable transport in the county of Norfolk, U.K., is the North Norfolk Community Partnership (NNCP) who manage a programme called Active Travel. Their primary aim is to develop networks of multi-purpose routes in North Norfolk promoting modes of travel other than motorised transport (NNCP, 2009). Following a study conducted in association with the NNCP in 2007, six potential multi-purpose routes were identified throughout North Norfolk, one of which was the Three Rivers Way (3RW).

The 3RW is a proposed 7.5 mile route in the Norfolk Broads national park developed by the Three Rivers Way Association (3RWA), an organisation formed by local residents to the Norfolk Broads area (MMG, 2008). The overall objective of the route is “to link villages on the Northern Broads rivers (Hoveton, Horning, Ludham and Potter Heigham) with a safe, pleasant route for walkers, cyclists and those with mobility problems” (3RWA, 2009). One of the aims of the 3RWA is to
improve tourism in the area and raise the local economic base. This aim is the primary focus of this study, with the addition of assessing the potential for sustainable tourism in this area of the Norfolk Broads through the development of the 3RW. (3RWA, 2009)

The main authority in charge of the Norfolk Broads national park is the Broads Authority. The Broads Authority’s two main objectives include “conserving and enhancing natural beauty and promoting enjoyment by the public” (Broads Authority, 2006; pg 1). Due to the importance of tourism in the Norfolk Broads, the Broads Authority released its most recent tourism strategy in 2006 highlighting current trends, benefits, problems and objectives for tourism in the area. It states that one important factor determining the success of rural destinations is the availability of facilities for short walks, of which the Norfolk Broads national park has very few (Broads Authority, 2006). It is particularly important in this area that the relevant pressures of tourism are appropriately balanced with the region’s environmental and the socio-economic attributes; a further increase in tourism could lead to a disturbance of local wildlife or cause potential negative socio-economic impacts (Brower, 2001).

2. Literature Review

2.1 Sustainable Development

Sustainable development, most commonly defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987; pg 43) is becoming evermore incorporated into the fundamental principles of worldwide industries and sectors of society. A common problem is that the primary focus of the negative impacts resulting from developments is most commonly centred on environmental issues. However, the defining feature of sustainable development is that “it is not concerned with preservation of the physical environment but with its development based on sustainable principles of which the environment is only one” (Baros and David, 2007; pg 144); the other two elements being economic and social impacts.
Sustainable development has been mentioned throughout history in a variety of different contexts. The foundation of the current principles of sustainable development are said to stem back from the historic romantic ideas where humans are to be seen as a part of nature and not superior to it (Hall, 1998; Hardy et al., 2002). The concept of sustainable development has widened over the last several decades following an increasing awareness of the links between socio-economic and environmental issues, and their potential impact on the world’s future (Hopwood et al., 2005).

2.2 Tourism

One of the key sectors that impacts increasingly on any progress towards sustainable development is tourism, the largest service industry in the E.U. and the third largest economic sector worldwide (E.U. Committee of the Regions, 2006). In 2005, the number of international travellers was about 806 million; a stark contrast with 1950 when there were 25 million (WTO, 2009). In terms of the economic sector, the tourism industry in the E.U. has achieved increased importance since 2001 due to its involvement in improving both the gross domestic product (GDP) and employment rates in various member states (E.U. Committee of the Regions, 2006). As the tourism industry continues to expand, 1.5 billion people are expected to travel internationally in 2020 (WTO, 2009). Hence, the growing emphasis on the development and practical application of sustainable tourism.

Within the tourism industry, a variety of terminology is used to describe the stakeholders and aspects involved (Table 1). Due to the fact that there are a variety of ways that one could travel (e.g. overnight or day trips), vocabulary defining the variety of potential tourists have been developed. There have also been extensive studies conducted on different types of tourism, especially the relationship between tourism, recreation and leisure (Figure 1).
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor</td>
<td>A person visiting a country other than that in which he has his usual place of residence, for any other reason than following an occupation from within the country visited (Keyser, 2002; pg 17)</td>
</tr>
<tr>
<td>Tourist</td>
<td>A person who travels to a place other than that of his/her usual environment (home, working and studying places) for a minimum of one night and a maximum of one year, and whose main purpose of travel is other than the exercise of a remunerated activity. (E.U. Committee of the Regions, 2006; pg 14)</td>
</tr>
<tr>
<td>Domestic Tourist</td>
<td>A domestic visitor staying more than one night in a collective or private accommodation in the place visited in her or his own country (E.U. Committee of the Regions, 2006; pg 14).</td>
</tr>
<tr>
<td>Recreational Tourist</td>
<td>A tourist who travels across national borders or through immigration control points (Keyser, 2002; pg 40).</td>
</tr>
<tr>
<td>Domestic Tourist</td>
<td>A domestic visitor staying more than one night in a collective or private accommodation in the place visited in her or his own country (E.U. Committee of the Regions, 2006; pg 14).</td>
</tr>
<tr>
<td>International Tourist</td>
<td>A tourist who travels across national borders or through immigration control points (Keyser, 2002; pg 40).</td>
</tr>
<tr>
<td>Recreation</td>
<td>An enjoyable leisure activity. (Oxford dictionary, 2008)</td>
</tr>
<tr>
<td>Tourism</td>
<td>Tourism comprises the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes (WTO, 1993)</td>
</tr>
<tr>
<td>Leisure</td>
<td>Time over which an individual exercises choice and undertakes activities in a free, voluntary way. (Herbert, 1987)</td>
</tr>
<tr>
<td>Casual Leisure</td>
<td>Immediately, intrinsically rewarding, relatively short-lived pleasurable activity requiring little or no special training to enjoy it (Stebbins, 1997; pg 18)</td>
</tr>
</tbody>
</table>


Figure 1: The relationship between leisure, recreation and tourism  
Source: Keyser, 2002

Leisure is an overarching idea; within it are contained the vast majority of the constituent parts of the tourism industry as a whole. The definition of leisure is time when an individual has complete voluntary choice over the activities that they undertake (Herbert, 1987). The particular activities that people choose to undertake during their leisure time are defined as recreation (Keyser, 2002). The only type of travel that does not fall under the category of leisure is business travel, as an individual has to adhere to activities proposed by their business,
which are not considered voluntary. The distinction between recreation and tourism is identified through the origin of the visitor and the location; tourism is undertaken in an area that is separate from a person’s usual environment whereas recreation can be activities carried out by residents in their local area (Keyser, 2002). There are widely conflicting views throughout the literature on the definitions and the relationship between tourism and recreation. On the one hand, ‘tourists’ are seen to be primarily responsible for the negative impacts resulting from tourism and ‘recreational users’ are seen to take more care not to harm the environmental surroundings of an area (McKercher, 1996). On the other hand, a variety of literature advocates the idea that there is no need to differentiate between regular tourists and tourists who are considered to be participating in recreation, as both have the potential to impact an area through the consumption of tourism products (Yuan, 1990; Manning, 1990; Mercer, 1991). This study aimed to assess the views of all potential users of the proposed 3RW, including visitors to the area and local residents. Due to the fact that both of these groups have the potential to use the route in a similar way, but have a different association with the area, this study will adopt the former view considering that there is a potential difference in the types of impacts that regular and recreational tourists will cause.

The tourism industry can inflict an array of environmental or socio-economic impacts upon a host destination. The E.U. Committee of the Regions (2006) states that the most common negative environmental impacts caused by the presence of unsustainable tourism is use of water and land, use of energy, generation of waste, erosion of soils and loss of biodiversity. Socio-economic impacts include problems such as noise and congestion (Budeanu, 2007). All of these factors are part of the tourism market (Figure 2), involving the consumption and demand patterns of tourists for tourism products supplied in the world market (Middleton, 1997).
One of the main factors influencing the severity of the impacts caused by tourists is their level and type of resource consumption. There is literature proposing that the way in which people interact with the local environment when they are on holiday is often a reflection of their actions in their everyday life (Williams et al., 1996). For example, Swarbrooke (1996; pg. 70) stated that “people do not buy holidays in isolation; they are an extension of everyday lifestyles and are usually linked in some way to how consumers buy other products”. Due to the increasing worldwide awareness of environmental issues and green consumerism trends, this implies that there is a potential for the demand of sustainable tourism products. However, there is contesting literature suggesting that one of the main problems with tourism is that people tend to consume more resources while they are on holiday compared to their consumption patterns at home (E.U. Committee of the Regions, 2006). This method of resource consumption could lead to a variety of negative environmental impacts ranging from resource depletion to increased waste disposal (E.U.
Committee of the Regions, 2006). However, increased resource consumption could have a positive economic impact if visitors are purchasing items from local shops or partaking in activities that feed back into the local economy. However, as this has the potential to lead to negative environment impacts, an appropriate balance needs to be met with the potential socio-economic impacts in order to reach sustainable tourism.

Hardy et al. (2002) stated that earlier authors often commented on the fact that tourism would bring large benefits to a host community as it would aid in the development of their society. However, later literature did state that this is not always the case and an increase in tourism could negatively impact a society, resulting in problems such as those displayed in Figure 2. Therefore, the potential for sustainable tourism cannot be assessed across the industry as a whole; it needs to be evaluated within the context of a particular region’s characteristics and tourist behaviour (Budeanu, 2007). This study aims to use the idea of the tourism market by assessing the five different elements highlighted in Figure 2 (i.e. types of tourists, factors of selection of tourism products, tourism products, factors influencing the severity of the impacts of tourists and environmental impacts) for the potential users of the 3RW.

2.3 Tourism Demand

Tourism demand is one of the main aspects influencing trends found within the tourism industry. When individuals choose to go on holiday there are several decisions that they need to make: for example, accommodation, transport, length of stay, price and destination (Alegre and Pou, 2006). Overall, tourism demand is directly influenced by two major factors: society as a whole (‘demand determinants’) and the characteristics of an individual (‘travel motivations’) (Figure 3) (Keyser, 2002).
Important determinants influencing tourism demand in the country of a tourists’ origin are population, income (national income for business travellers and personal disposable income for private travellers) and marketing of travel destinations. Determining factors from the destination are price (of substitutes, transport to and from the destination and living costs), and the trends and popularity of destinations (Witt and Witt, 1995). Due to resources, the scope of this study solely examines the demand for the 3RW and the potential impacts of that demand, but not the reasons for the demand.

The demand for sustainable tourism is increasing (Miller, 2003; Budeanu, 2007; Godfrey, 1998). However, statements such as these must be interpreted with caution as the behaviours of tourists do not always match their attitudes. A study conducted by Budeanu (2007) asked respondents to rate statements related to sustainable tourism on a likert scale; the majority (85%) of British tourists said that it was ‘very important’ or ‘fairly important’ that their holidays do not harm the environment. However, only 32% of these respondents said that they choose holidays specifically designed to decrease the negative environmental impacts on the environment (Budeanu, 2007). Budeanu (2007) also found that around 70-80% of tourists stated that they have a high concern for the economic and social impacts of their holidays, but only 10% of these tourist let these concerns affect their holiday decisions. Therefore, due to this problem of
social desirability bias, the potential for sustainable tourism cannot be judged solely on hypothetical demand of people.

The overall demand for tourism products will always remain high because people will always need or want to travel (Conrady and Buck, 2008). Therefore, the most realistic solution to tackle the present dilemma (the need to stop current unsustainable travel trends and the desire of people to continue travelling) is the introduction of sustainable tourism (Conrady and Buck, 2008). The concept of sustainable tourism could result in a balance within which the tourism industry could continue to thrive, without the current negative global and local impacts that it causes.

2.4 Sustainable Tourism

Sustainable tourism can be defined in a variety of ways depending on the circumstances within which it is being examined, although the different definitions and interpretations all branch off one overall idea (Hardy et al., 2002). One of the most commonly cited definitions for sustainable tourism, based around the WCED (1987) definition of sustainable development, is that it “meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to the management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems” (WTO, 1993; pg. 7). Although a recently developed term, sustainable tourism has been thought about theoretically throughout the past (Hardy et al., 2002). For example, the term ‘new tourism’ was used in the late 1970s emphasising the need to promote the education of tourists, lay within carrying capacities and preserve towns within the tourism context (Rosenow and Pulsipher, 1979). However, the definition above is somewhat contradicting in terms (e.g. the “needs of present tourists and host regions” (WTO, 1993; pg. 7) are often not compatible). For example, although the influx of tourists could be beneficial to an area (e.g. support the local economy), there could be negative
impacts such as congestion, increased prices and litter pollution (Mason and Cheyne, 2000). Another problem with the concept of sustainable tourism is its lack of connection with the overarching paradigm within which it falls: sustainable development (Sharpley, 2000). The development of sustainable tourism is often found to be primarily centred around the small scale tourism industry; in order to achieve sustainable tourism to the scale that it would contribute to sustainable development, it is essential to aim for developments that transbound into the wider industry and other sectors of society (Sharpley, 2000). Routes such as the proposed 3RW have the potential not only to encourage an increase in tourism in a particular area, but also to provide provisions for the use of alternative modes of transportation. In addition to this, it is possible that through the development of a number of such multi-purpose routes, facilities could be provided to encourage more widespread sustainable tourism opportunities.

It is essential that a development within the tourism industry provides quality experiences for visitors, that it ensures continuity of the local natural resources and host communities, and that it balances the needs of the tourism industry, local environment and host community (Keyser, 2002). Hardy et al. (2002) illustrate the debate over how the elements of sustainable tourism should be balanced: firstly, through complete balance between the environment, society (community) and the economy; and secondly, through a balance between those three elements that is decided to be appropriate by the host community (Hardy et al., 2002). The main problem with the latter perspective is that there is a chance that developments can be made without the complete involvement of all stakeholders, thus leading to a ‘balance’ of the elements that lean towards the desires of the developers (Downward and Lumsdon, 2001). This is potentially one of the reasons of why the environmental and economic impacts of a development are commonly weighted more strongly than social impacts (Hardy et al., 2002). This study aims to take into consideration the views of three different stakeholders in this area of the Norfolk Broads (visitors, residents and businesses) in order to
get a more balanced perspective of the potential impacts that could result from the development of the 3RW.

This study aims to evaluate not only the potential for the use of the 3RW, but also if it would encourage people who primarily drive in the area to change to more sustainable modes of transport. There is an underlying idea that if new sustainable tourism products are developed instead of old existing problems firstly being dealt with directly, there is a chance that the changes towards sustainable tourism in the area would not be significant (Hardy et al., 2002; Butler, 1998). However, there are times when the development of new products could lead to changes in behaviour that would be more sustainable (e.g. using more sustainable modes of transportation).

There are a variety of tools available that can be used to assess whether a tourism destination is successfully achieving the objectives of sustainable tourism, the most common of which is carrying capacity: “the number of visitors an area can sustain without degrading natural resources and visitor experiences” (Prato, 2001; pg 322). Despite the fact that the concept of carrying capacity originated as a biological model, it has been adapted to fit other sectors such as physical and social (Keyser, 2002). However, it is often difficult to transfer this concept into other dimensions, especially within the tourism industry (McCool and Cole, 1998; Lindberg, 1997). One of the main problems of using carry capacity in the tourism industry is that there is no, or very little, guidance for practical implementation (Lindberg, 1997). Another method, Limits of Acceptable Change (LAC), is more acceptable for this study. Therefore, the main concept of this tool will be used as the basis of this study: the limit to which a host destination would find the changes acceptable (Keyser, 2002). It focuses more on visitor behaviour, whereas carrying capacity looks more at visitor numbers. This study aims to assess visitor behaviour and assess stakeholder views of the potential development of the 3RW.
There are a variety of types of tourism that fall within the principles of sustainable tourism (Table 2).

Table 2: Types of sustainable tourism

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Eco Tourism</td>
<td>Responsible travel to natural areas that conserves the environment and improves the well-being of local people. <em>(TIES, 1990)</em></td>
</tr>
<tr>
<td>Nature Tourism</td>
<td>Travel to places for activities and experiences that are entirely dependent on nature. <em>(Keyser, 2002)</em></td>
</tr>
<tr>
<td>Rural Tourism</td>
<td>The distinguishing feature of rural tourism is the wish to give visitors personalised contact, a taste of the physical and human environment of the countryside, and, as far as possible, allow them to participate in the activities, traditions, and lifestyles of local people. <em>(OECD, 1994)</em></td>
</tr>
</tbody>
</table>

Adapted from: TIES, 1990; Keyser, 2002; OECD, 1994

Rural tourism is the most applicable to the development of the 3RW. Eco-tourism is more associated with the travel to experience the cultures and environment of developing countries *(Bell et al., 2007)*. However, there are some aspects of eco-tourism that could be relevant to the 3RW development; it is travel where the flora, fauna and cultural heritage are the main attractions *(Bell et al., 2007)*. Nature tourism is focused around the appreciation of the local environment, but there are a lot of sites of cultural interest and villages in the Norfolk Broads that restrict it from being a site completely under the label of nature tourism. Rural tourism in the U.K. is extremely important; “it may even be argued that the tourism industry (in the U.K.) has now become the lynch pin of many rural communities, having effectively replaced agriculture in this role” *(Garrod et al., 2006; pg 118)*. Rural tourism alone cannot be considered a type of tourism that would necessarily lead to sustainable tourism as it also largely depends on how it is managed, and the behaviour of the tourists *(Brouwer, 2001)*. One of the main activities people undertake when visiting the Broads is boating, which has in the past led to a variety of negative impacts; overcrowding problems impacting both the residents’ views about tourism in the area and the visitors’ level of enjoyment *(Brouwer et al., 2001)*. The importance of rural tourism is its mutual relationship with the countryside. Rural tourism has a very high level of dependence for the resources available through the countryside’s capital assets *(Garrod et al, 2006)*.
Governmental initiatives have been used to try to tackle problems resulting from urbanisation (Lane, 2005). Urbanisation is a large factor in problems such as obesity and lack of environmental awareness, due to the minimal amount of green space in people’s everyday surroundings (Bell et al., 2007). Miller (2003) stated that the market for nature tourism increases at an annual rate of about 25-30%. Surveys have shown that the reason for this increase is the fact that visitors want “high quality and ‘unspoiled’ scenery, for peace, quiet, and, to some extent, solitude” (Lane, 2005; pg 13) The increasing demand for sustainable tourism is also linked with the development of green consumerism: where people look to protect themselves and their world through purchasing decisions (Miller, 2003).

Government-led initiatives in the U.K. have recently also focused on eliminating the problem of social exclusion in the country (Cope et al., 2003). Inclusion is one of the most important aspects of sustainable tourism; in addition to the residents who might be affected by an increase in tourism, those who might be able to participate in the recreational activities available should also be considered (Downward and Lumsdon, 2001). Developing cycle and walking routes in rural areas can provide facilities for people without regular, or easy, access to be able to participate in recreation such as walking and cycling (Cope et al., 2003). Studies conducted on the UK National Cycle Network (NCN) showed that the routes that run through relatively deprived areas have a high rate of people using the route, for leisure purposes, including groups who are often left out from participating in these types of activities, such as the disabled (Cope et al., 2003). The problem with ecotourism is that it is a type of tourism that has invariably lacked in its potential popularity due to the fact that it has sometimes been considered as more of a marketing label as it only directly includes certain demographics and stakeholders (Hardy et al,. 2002).

Scotland is one of the most highly visited areas in the U.K. due to its environmental aspects and cultural heritage. However, although sustainable tourism is visible in parts (e.g. Cairngorms National Park) there are a variety of obstacles that prevent the Scotland from achieving complete sustainable tourism
The main challenges highlighted concerning Scotland’s position on providing sustainable tourism are seasonality, transportation, resource use and waste, quality of natural and cultural heritage, quality of life of the host communities, employment opportunities and inclusion (VisitScotland, 2009). These challenges are applicable to the vast majority of holiday destinations worldwide, including the proposed 3RW. These challenges are in tune with the ideals of sustainable tourism as they are faced when trying to minimise the impacts for both the socio-economic and environmental qualities of Scotland. The Cairngorms National Park in Scotland is one example of a park whose objectives lead to sustainable tourism. One of their main action plans is to “Provide High Quality Opportunities for Outdoor Access”, which aims to maintain and further develop a path network that would enable visitors to walk in and around the park while completely minimising the use of motorised vehicles. (Cairngorms National Park Authority, 2009).

2.5 Transport

It is estimated that 25% of all carbon dioxide emissions, a greenhouse gas contributing to global warming, is emitted by the transportation sector (Conrady and Buck, 2008). The transportation sector within the tourism industry (primarily car and air travel) is responsible for 50-75% of the negative environmental impacts caused by the tourism industry (Verbeek and Bargeman, 2008). Three of the major environmental and social impacts of the transportation sector are air pollution, congestion and noise (Budeanu, 2007). 80% of all the air travel within Europe is for tourism purposes (Bohler et al., 2006). These statistics present the fact that one of the key sectors that must be tackled in the tourism industry, in order to minimise its impacts, is transportation.

One of the main reasons for the abundance of impacts resulting from transportation within the tourism industry is that the two sectors often plan independently of each other; transportation authorities plan primarily for efficient transportation facilities, while the tourism industry’s main focus lies with issues
that are in the best interest for the success of tourism products \cite{Lumsdon2000}. Cycle routes, such as the U.K. National Cycle Network (NCN), or the proposed 3RW on the Norfolk Broads, have the capacity to provide for both recreation and transport \cite{Sustrans2009}. These types of routes can promote types of tourism such as cycle tourism, which fall under the overarching idea of sustainable tourism due to their three different attributes: they are non-polluting, encourage visitors along cycle route to consume products from the local services (which improves the local economy), and cause less congestion compared with tourism undertaken by motorised vehicles \cite{Cope1998}. Lumsdon \cite{Lumsdon2000} emphasised the fact that cycle routes and networks should not be seen as a transport or recreation facility independently of each other, but they should promote the integration of the two sectors. This is another reason why this study aims to look at the potential use of the 3RW by both visitors and residents.

Throughout history, methods of transportation have always been important to the structure and development of society \cite{Lowson1998}. Analysis of the recent trends of car use, and the increasing awareness of environmental issues, suggest that the prevalence of car use will start to diminish as more sustainable modes of transport become dominant \cite{Lowson1998}. Currently 68\% of tourists in the E.U. travel by car, but recent trends show the increasing use of more sustainable modes of transportation. One example of this is that there are more cyclists and walkers on the NCN now than ever before, amounting to about one million journeys a day \cite{Sustrans2009}. This provides evidence to show that one method to encourage more sustainable modes of transport, such as cycling or walking, can be increased through providing the appropriate facilities \cite{Sustrans2009}.

One of the key aspects is not only the modes of transportation used, but also the distance travelled. Currently, the majority of European tourists are made up of European residents, and two thirds of tourists from the E.U. chose to go on holiday within their own country \cite{E.U. Committee of the Regions2006}. The
importance of local travel is a significant factor in the drive towards sustainable tourism as the further the distance travelled in unsustainable modes of transport, the more significant the impacts.

2.6 Conclusion

Depending on the destination and the attractions, activities and amenities available at that particular destination, different types of tourists are attracted to different holiday destinations (Conrady and Buck, 2007). In order to ensure that the supply of tourism products meets the demand of tourists, and vice-versa, appropriate planning and management of tourism products are essential (Downward and Lumsdom, 2001). “An understanding of the characteristics and attitudes of users is important because of the personal and subjective way greenways are used (...) planning and management decisions should not be made without basic knowledge of the user and his or her attitudes” (Furuseth, 1991; pg 336). Therefore, this study is based around identifying the type of tourists currently visiting the Norfolk Broads national park, the potential demand for the use of the 3RW, and any socio-economic (negative and positive) that are potentially associated with the development of this route.

2.7 Aims and Objectives of the Study

1) To assess the potential for sustainable tourism in this area of the Norfolk Broads following the development of the 3RW.

2) Assess the views of the 3RW concerning the development of the three main stakeholders in the area (business, visitors and residents).
   a. Look at the visitors’ demand in order to assess the potential for an increase in tourism following the development of the route.
   b. Assess the residents’ views on whether they believe an increase in tourism would occur as a result of the development of the 3RW and whether this increase would be positive or negative.
c. Assess whether the development of the 3RW has the potential to increase recreational tourism (local residents using the route for leisure).

d. Evaluate the businesses’ views of the potential impact of the route on their businesses in order to determine the prospective impacts upon the local economic base.

3) Determine the prevalence of car use in the area and whether there is a potential for the 3RW to encourage more sustainable modes of transportation, in relation to tourism.

4) Assess the current tourism trends in the Norfolk Broads (e.g. how often people visit the Norfolk Broads and what kind of activities they undertake).

3. Methodology

3.1 Study Area

The chosen research area for this study was the Norfolk Broads national park. Located in the East of England, the Norfolk Broads was designated a national park in 1988 and covers 303km² (Sharpley and Pearce, 2007). It is the UK’s largest protected wetland and home to an array of different species (Broads Authority, 2009). The Norfolk Broads has a population of approximately 5,500 residents and receives around 5.4 million visitors a year (Sharpley and Pearce, 2007).

The proposed route of the 3RW runs between four towns on the Norfolk Broads: Wroxham, Hoveton, Ludham and Potter Heigham (3RW Association, 2008). The main walking and cycle route runs from the Hoveton and Wroxham train station to Potter Heigham, with other routes (such as routes to places of special interest) branching off the main route. The map presented in Figure 4 has been split into three parts (the western, central and eastern zone), to display the ways in which the residential areas were split up for the analyses of the resident survey (explained in more detail in Section 3.5).
Western Zone

Central Zone

Eastern Zone

Figure 4: Map of the proposed 3RW route

Source: MMG, 2008
One part of the route has already been developed; it is located in the Western Zone and runs from the Hoveton and Wroxham train station until just before Horning. The areas of the route that are outlined by boxes in Figure 4 are the proposed routes by the 3RWA. The main routes are designed to accommodate for cyclists, walkers and mobility vehicle users. However, there are a few routes that will be created for the use of either walkers or cyclists only (3RWA, 2009).

A feasibility study was conducted on the route by Mott MacDonald (2008), which highlighted in detail the biodiversity on each section of the route. There were suggestions on the best way to build the route in areas where there were sensitive habitats considered to be of special interest. Currently the area where the development of the 3RW is being proposed is made up of “highway verge, undadotad highway, private land, existing sections of narrow footways, high speed carriageway and segregated footways along quiet community roads, village centre environments, busier commercial areas (...) non footway roads, cuttings, embankments and traverses some boggy ground within the Ludham bridge vicinity” (MMG, 2008; pg 3). The majority of recommendations suggest that the 3RW would not negatively impact the biodiversity of the area as long as the route is built with sufficient distance from verges, hedgerows and trees. In areas where there are sensitive species (e.g. the Mature Oak trees at the crossing to the southern side of the A1602 until Mill Hill) care should be taken to the extent that construction should be done by hand (MMG, 2008). In order to protect the trees around Market Road, the recommendation was to have visitors use the carriageway for this section of the road due to the fact that it is a minor road (MMG, 2008). Through an analysis done on cyclists’ demands of cycle ways, one of the priorities that they gave was that the route would either be off-road or on quiet roads (Downward and Lumsdom, 2001). Therefore, the impact of part of the route being on a minor road would most likely not have a significant impact on the demand or usage of the 3RW. Along Horsefen Road, past Womack Water and along the riverbank, the route does run alongside a heavy protected area (i.e. Ramsar site, Special Area for Conservation, Special Protection Area, Site of
Special Scientific Interest and National Nature Reserve). However, the feasibility study confirms that the 3RW is unlikely to have a negative environmental impact upon any area along the route, including the protected site (MMG, 2008). As the potential environmental impacts have already been assessed, this study aims to look at the potential socio-economic impacts to fulfil the principles of sustainable tourism, by balancing the three aspects.

The Norfolk Broads was chosen as the study area due to the fact that it is among the most commonly visited natural tourist sites in England. However, a further increase in tourism in this area is not widely accepted as positive; there are residents, and visitors alike, who continue to hold the views first highlighted in the 1960s that an increase in tourism would lead to overcrowding and congestion (Broads Authority, 2005). However, it is evident that tourism is one of the most important sources of income for the Broads area, as it keeps over 3,000 people employed and provides a variety of businesses in the area with a steady source of income (Broads Authority, 2009). Originally, tourism was centred on water-based activities, and the majority of businesses that thrived were the boatyards and waterside facilities (e.g. pubs and restaurants). Recently, the trends have changed as the demand for boating has decreased, and the demand for land based tourism has increased (Broads Authority, 2006).

A visitor survey conducted in the late summer months of 2005, distributed to over 800 land and water-based visitors in the Norfolk Broads, showed that walking was rated one of the most important activities in the area (Broads Authority, 2006). However, despite the popularity of walking for visitors and residents, “compared with any other national parks, walking routes and information about walking are limited. Walking opportunities in the Broads are generally rather fragmented and there is no comprehensive information available about where to go” (Broads Authority, 2006; pg 10). Another land based tourism activity important to the Norfolk Broads area is cycling due to the flat, low lying topography of Norfolk, which makes it appropriate for cyclists of all levels. The
NCN runs alongside the Norfolk Broads, but does not provide access to cyclists within the Norfolk Broads area \citep{BroadsAuthority2006}. However, the lack of designated cycle routes requires cyclists in the area to use the roads to cycle.

The lack of facilities in the Norfolk Broads area restricts the ability of visitors to use more sustainable modes of transport to travel around the area. The importance of routes such as the NCN, or the proposed 3RW, is that they provide provisions for visitors to participate in a wider variety of land-based tourism, based around more sustainable modes of transportation. It is evident, especially through the 2005 Broads Authority questionnaires, that there is a demand for activities such as walking. However, despite the demand for the use of the 3RW (which is also evaluated through this study), the potential for not just an increase in tourism, but the development of sustainable tourism, is also evaluated.

3.2 Data Collection

The main method of data collection was from primary sources through the distribution of questionnaires to three different stakeholders: businesses, residents and visitors to this area of the Norfolk Broads. The business questionnaires were used in order to assess the potential economic impact in the area. The visitor and resident surveys were used to assess visitor demand, the host community’s needs and desires, and potential socio-economic impacts \citep{Hunter1997}. Visitor views were assessed due to the fact that the development of routes such as the 3RW has been done in the past without much research on user profiles. This lack of research has often led to unpopularity of the developed route due to the fact that the needs and desires of potential users have not been considered \citep{DownwardAndLumsdon2001}.

3.3 Questionnaire Design

The templates of the business, visitor and resident questionnaires are presented in Appendix 1, 2 and 3, respectively. The questionnaires were split up into several different sections. Respondent characteristics (e.g. age and gender...
for resident and visitor survey, and length of season and nature of business for business survey) were obtained in order to be able to assess the range of the respondents’ demographics. Due to the abundance of automobile use in the Broads area (Broads Authority, 2009), the car usage of each stakeholder group was assessed and whether the development of the route would encourage them to change to a more sustainable mode of transport. Visitors and residents were also asked what they would use the route for (e.g. travel between the villages or leisure). In order to get a clearer picture of the potential social impacts for the use of the 3RW, visitors were also asked what they thought the potential advantages and disadvantages of the route would be. Due to the suggested negative attitudes of residents towards an increase in tourism (Broads Authority, 2006), residents were asked whether they perceive that the development of the 3RW would lead to an increase in tourism and if so, whether this would be negative or positive. The range of activities on the visitors’ survey was chosen primarily from information displayed by the Broads Authority (2009) on the activities undertaken by current visitors to the Norfolk Broads.

The majority of questions on the questionnaires were closed questions, which asked respondents to choose one answer out of a list of possible responses. Where it was appropriate (e.g. when asking what activities people undertake in the area), respondents were given an option to choose more than one answer. The use of closed questions was to ensure that the responses would be directly comparable for statistical analyses (Oppenheim, 1992). There were, however, two open answer questions in each questionnaire (i.e. the advantages and disadvantages of the development of the route, and those of an increase in tourism). The open questions were used in order to prevent questions to be too leading and to get a variety of answers from the respondents that might not have been discovered through a closed question, where respondents are asked to choose from a list of pre-determined answers. (Oppenheim, 1992)
3.4 Questionnaire Distribution

The questionnaires were distributed over a two week period around the beginning of the high tourist season (May 23, 2009 until June 7, 2009). The businesses questioned were located at a variety of points on, or in close proximity to the proposed 3RW (Figure 4). The main areas where the resident and visitor responses were obtained were in the towns of Wroxham, Horning and Potter Heigham, and along with the proposed 3RW route.

Face-to-face surveys are defined as “the mode in which an interviewer administers a structured or partly structured questionnaire to a respondent within a limited period of time and in the presence (usually at the home) of the respondent” (de Leeuw, 1992; pg 3). However, the method of distribution was modified slightly from the definition presented by de Leeuw (1992). In order to ensure a higher response rate within a shorter period of time, questionnaires were distributed to respondents in public places and then collected again upon completion (after about five minutes). This enabled several questionnaires to be distributed at once. This also helped to slightly prevent the issue of social desirability bias (one of the disadvantages of face-to-face surveys) as the respondents were able to complete the questionnaires in privacy (de Leeuw, 1992). The questionnaires were distributed completely randomly with no restrictions on the type of people that were asked. This method worked very well as the vast majority of people approached agreed to complete the questionnaire. There is no record of the response rate due to the fact that there was no set number of questionnaires distributed; it was distributed at random to anyone who agreed to complete it. The advantages of doing a face to face survey was that it allowed flexibility in the times and places where the questionnaires were distributed and ensured the potential for higher response rates (de Leeuw, 1992). Another method that could have been used (for the resident and business survey) would have been to distribute the questionnaires by post with a return envelope. The advantage of this method is that it is less time consuming however it does run the risk of having a lower response rate and therefore was not chosen to be used (de Leeuw, 1992).
After several surveying days, it was evident that the majority of respondents were visitors. In order to make the sample size of the resident and visitor surveys more equal, there were certain days where the focus was placed on targeting residents. For example, on June 4th election day, questionnaires were distributed at polling stations to ensure that the views of residents in the area were being taken into consideration to the same extent as the visitors. However, in order to ensure that the sampling remained completely random, if a visitor was approached, they would still be asked to complete the questionnaire.

The business questionnaire was distributed slightly differently. The 3RWA compiled a list of businesses in the area to which questionnaires were distributed face-to-face. The businesses were given the option to complete the questionnaire immediately or they could complete it at a more convenient time and send it back with a stamped envelope that was provided; the majority of the businesses chose the former method. The latter option, of which approximately 15% of the businesses decided to use, was made available because there were a few questions on the business questionnaire that needed specific figures, which would have possibly not been available immediately (e.g. percentage of employees who drive to and from work). The advantage of postal surveys is that there is “more self disclosure on sensitive topics” (de Leeuw, 1992; pg 118).

3.5 Results Analysis

The results of the questionnaire were put into the statistical software SPSS, where analyses were conducted in order to determine significant relationships and trends between the variables. Initially, the frequencies were calculated for all of the results in order to assess general trends. Crosstabs statistics were used in order to determine the relationships between the variables. The questionnaires were analysed separately from each other in order to identify trends within each stakeholder group (i.e. businesses, visitors and residents). At first, two variables were tested against each other and then where appropriate, a layer variable (a
third one) was added in order to test whether the significance found in the original test was actually influenced by another variable. Following the test conducted for each stakeholder group individually, this test was also used to identify any trends interlinking the different stakeholder groups. *(Pallant, 2007)*

In order to assess if these relationships are considered significant (not due to chance), they would have to have a significance level of 0.05, determined by the Pearson’s Chi-squared test. While the Chi-squared test displays whether the results are significant, symmetric measures (Phi, Cramer’s V and the Contingency Coefficient) were used in order to determine how strong the relationship is. If the values of all the symmetric measures are all over 0.3 (with a significance level over 0.05) the relationship is considered strong. *(Pallant, 2007)*

One adjustment that was made to the results was that several of the categories were combined in order to make them more appropriate for statistical analyses. For example, since only four respondents of the visitor survey were from outside of the U.K., the categories were combined in order to make two new ones: local (from Norfolk and East Anglia) and non local (from Europe and outside the U.K.). The new categories were decided on a basis of what was important for statistical reasons. When analysing what factors would influence people’s use of the route, the most important thing is whether people would use it. Therefore, the categories were again combined to two: one representing respondents who said that they would use the route, and another to represent respondents who said they would not use the route or they don’t know whether they would.

### 3.6 Limitations

There were a few limitations to this study. First of all, the number of respondents for each questionnaire was not high enough to give a completely representative sample; there were 146 visitors, 133 residents and 65 businesses that completed the respective questionnaires. The importance of obtaining a representative sample is to be able to “identify the views of the entire community
on particular issues in order to create the possibility that subsequent plans will reflect community desires" (Glass, 1979; pg 182). However, due to the resources during this study (primarily personnel and time) the ability to gain a truly representative sample was unachievable.

Another limitation come across during the study is that of social desirability bias. Some of the questions placed respondents in hypothetical situations (e.g. *If the 3RW was developed, would you use the route?*), which have to the potential for social desirability bias as people might answer this question in a way that they feel is expected. An example of this situation was displayed in a study conducted by Budeanu (2007), which showed that only one-twentieth of respondents’ actions matched their stated attitudes. The questionnaire was distributed in a way that allowed the respondents to complete the questionnaire in privacy in order to minimise the problem of social desirability bias.

There was a lack of consistency in the way that the business questionnaire was administered. Due to the fact that there were two different methods of distribution (face-to-face and postal) of this questionnaire, there is a possibility that the responses gathered from this questionnaire are not consistent. However, due to the fact that the vast majority of businesses decided to administer the face-to-face method, this is not a serious limitation as only there was only a minority (around 15%) of the responses would be potentially be affected by this.

This study only looks at the views of the different stakeholders and does not gather any further empirical evidence. Therefore, the conclusions made through this study would not necessarily happen and are just predictions. For example, the results of this study present the fact that the majority of businesses believe that the development of the 3RW would increase their customer numbers. However, this is solely based on the fact that this is what the businesses believe, and not what is definitely going to happen. Another example is how the majority of residents state that they believe the development of the 3RW would result in an
increase in tourism. Therefore this study concludes that there will be an increase in tourism (also linked with the results that show that visitors would increase their frequency of visits to the area) but it is not definite evidence.

4. Results and Discussion

4.1 Introduction

The significant results obtained from the analyses, and their association with the overall objective of assessing the potential for sustainable tourism, are discussed in further detail within this section. All the questionnaires were fully completed with no missing data. Further detailed statistical results are displayed in Appendix 4.

4.2 Visitor and Resident Survey Respondents Characteristics

The total sample size consisted of 279 respondents (146 visitors and 133 residents). The demographic characteristics of the respondents were collected in order to be able to ensure that a representative sample of the relevant stakeholders was obtained. Age and gender were two categories that were collected from the visitors and residents in the area (Table 3). These results were compared to those of a survey conducted by the Broads Authority in August and September of 2005, which gave an overview of the visitor profiles during that time (Broads Authority, 2006).

Table 3: Demographic characteristics of the respondents of the visitor and resident survey

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Visitors</th>
<th>Residents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;18</td>
<td>0</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>19-25</td>
<td>19</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>26-40</td>
<td>16</td>
<td>13</td>
<td>29</td>
</tr>
<tr>
<td>41-65</td>
<td>76</td>
<td>66</td>
<td>142</td>
</tr>
<tr>
<td>&gt;65</td>
<td>35</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>66</td>
<td>131</td>
</tr>
<tr>
<td>Female</td>
<td>81</td>
<td>67</td>
<td>148</td>
</tr>
</tbody>
</table>

It is evident that the age groups are not as evenly distributed as gender. The majority of respondents fell into the age category of 41-65. The remainder
were relatively evenly distributed, except for respondents under the age of 18; 26% of the residents fell into this age group while 0% of the visitors did. The highest amount of land-based visitors at the Broads in the summer of 2005, were 35-54 years olds (*Broads Authority, 2006*). Due to the fact that the age groups were categorised differently in the two questionnaires, the ages cannot be directly compared and only estimations can be made. Therefore, judging from the data collected by the two questionnaires, visitors to the Broads area tend to most commonly be over the age of 35.

For the resident questionnaire, respondents were asked which town in the Norfolk Broads area they live in closest proximity to, and how long they have lived there (Figure 5). The residence location of the residents was re-categorised in order to obtain numbers that were more appropriate for the statistical tests (Table 4). The zones were split up as follows: the Western Zone consisted of residents from around the villages of Wroxham, Hoveton, and Salhouse; the Central Zone was made up of residents from around the villages of Horning, Ranworth and Woodbastwick; the Eastern Zone was made up of residents from around Potter Heigham and Ludham. More detailed maps of these areas, and the parts of the 3RW route that are proposed in each zone, are displayed in Figure 4 in the Section 3.1.

![Figure 5: Area of residence (residents)](image)

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Number of Resident Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Zone</td>
<td>62</td>
<td>46.6</td>
</tr>
<tr>
<td>Central Zone</td>
<td>31</td>
<td>23.3</td>
</tr>
<tr>
<td>Eastern Zone</td>
<td>40</td>
<td>30.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>133</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4: Re-categorisation of Area of Residence (Residents)
<table>
<thead>
<tr>
<th>Amount of time lived in the Norfolk Broads</th>
<th>Number of Resident Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 years</td>
<td>17</td>
<td>12.8</td>
</tr>
<tr>
<td>5-10 years</td>
<td>28</td>
<td>21.1</td>
</tr>
<tr>
<td>11-15 years</td>
<td>28</td>
<td>21.1</td>
</tr>
<tr>
<td>16-20 years</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>&gt;20</td>
<td>48</td>
<td>36.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>133</td>
<td>100</td>
</tr>
</tbody>
</table>

The highest number of respondents of the resident questionnaire were residents who live in, or close proximity to, the towns of Potter Heigham (30 or 23%), Wroxham (20%) and Hoveton (15%). One factor that could have led to higher respondents from Potter Heigham and Wroxham is that these towns were two of the three primary survey spots for the resident and visitor surveys. However, despite potential bias this was also somewhat unavoidable as these were the two biggest towns located directly on the proposed 3RW; the population for Potter Heigham is 961 and for Wroxham it is 1,532 (_ANY-Village, 2009_). In terms of the duration of residence, the group least represented were residents who have lived in the Norfolk Broads area for 16-20 years (Table 5). The most highly represented group were residents who have lived in the Norfolk Broads area for more than 20 years. Due to the fact that the Norfolk Broads was designated as a national park around 20 years ago, in 1988, this could have an influence on the views of the residents who have lived in the area for more than 20 years (_Sharpley and Pearce, 2007_). The remainder of the residents were quite evenly distributed, ranging between 12% and 9% of the total respondents.

The following figures (Figure 6 and Table 6) display where the respondents to the visitor survey are currently residents. Figure 6 presents the original data from the questionnaires before the results were re-categorised. This re-categorised data is presented in the table 6.
The majority of visitors to the Broads in the summer of 2005 were said to be from the South East and East of England, with 88% of the day visitors originating from the East of England (Broads Authority, 2006). These results are similar to those collected in this study, which showed that the majority (88 or 60.3%) of the respondents of the visitor survey were local residents to East Anglia. Before the data was re-categorised, the results from the visitor survey showed that 40.4% of visitors were from Norfolk, 19.9% from East Anglia, 37% from the U.K and the remaining 2.8% from outside the U.K (Figure 5). The survey conducted in 2005 came up with similar results; only 2% of the visitors were from countries outside of the U.K. (Broads Authority, 2006).

Currently local visitors (from within East Anglia) visit the Broads area frequently while non-local visitors tend to visit the Broads area more infrequently (Table 7). The symmetric values are all over 0.03, which show that this relationship is strong (Appendix 4).

Table 7: Area of Residence and Frequency of Visits

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Frequency of Visits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Frequent (Expected)</td>
</tr>
<tr>
<td>Local</td>
<td>56</td>
<td>42.2</td>
</tr>
<tr>
<td>Non Local</td>
<td>14</td>
<td>27.8</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>76</td>
</tr>
</tbody>
</table>

Sig. = 0.000
Downward and Lumsdon (2001) who analysed the characteristics of cyclists on a similar route in the Staffordshire Moorlands found that “most visitors travelled from within a 100-mile radius, mainly from within a travel time band of two hours” (Downward and Lumsdon, 2001). The abundance of local visitors presents the importance of this area for sustainable tourism, as it attracts people who travel short distances to holiday destinations. The further the distance travelled (especially if done by unsustainable modes of transport like cars) the higher the impacts from the transportation sector, as a result of the tourism industry, in this area.

One of the biggest issues related to the development of routes such as the 3RW is accessibility. As was displayed in Table 6, the majority of current visitors are local to the region. If the development of the 3RW increases the amount of visitors coming from further afield, is essential that the transportation they use to get to the 3RW route is sustainable in order to reach the objective of sustainable tourism. “Recreational cycle routes should be designed on the basis that they have the potential to reduce car mileage rather than encouraging it” (Downward and Lumsdon, 2001; pg 58). One end of the 3RW starts near the Hoveton and Wroxham train station, enabling people to bring their bikes on the train and then cycle on from there. The relationship between local and non-local visitors, and whether they would use the route if it were developed was not significant; there is just as high a chance for an increase in tourism by locals as well as non-locals. Therefore, the above mentioned issue is relevant to the development of the 3RW as there is a potential that it could increase the amount of visitors coming from outside East Anglia, as well as local visitors

4.3 Current Tourism Trends: Frequency of visits and activities

The frequency at which current tourists visit the Norfolk Broads national park was evaluated and compared to the activities they undertake. This was assessed in order to determine what types of activities attract current visitors to the Norfolk Broads, as that can give a good indication if the development of a
route such as the 3RW would encourage visitors to come to the Broads area more often.

![Figure 7: Frequency of at which current tourists visit the Norfolk Broads](image)

The visitors that were surveyed were relatively evenly distributed in terms of how often they visit the Norfolk Broads (Figure 7). Respondents ranged from people who visit the broads as much as twice a month to those who visit it less than once a year. These results show how the tourism industry is already thriving in the Norfolk Broads area, as the majority of visitors return at least every six months.

Visitors were then asked what activities they participate in when visiting the Broads (Figure 8).

![Figure 8: The type of activities visitors participate in when visiting the Norfolk Broads](image)
The vast majority of visitors enjoy going on walks throughout the area. In the summer of 2005 the majority of land-based visitors also enjoyed going on short walks (i.e. less than one hour) when visiting this area (Broads Authority, 2006). The popularity of going on short walks as an activity with U.K. tourists was also supported by the results of the United Kingdom Tourism Survey, which showed that the majority (55%) of holidaymakers in the U.K. like going on short walks (Broads Authority, 2006). Despite the fact that tourism on the Norfolk Broads has in the past largely been focused around water-based tourism, recently land-based tourism has surpassed boating in popularity (Broads Authority, 2006).

Only 18, or 12.3%, actually said that they come to the Norfolk Broads area to cycle. Cycling has become increasingly popular as a mode of transportation in the U.K. due to the development of cycle technology, the increasingly positive image of cyclists, environmental awareness and concern for health and wellbeing (Cope et al., 1998). However, the widespread use of cars in the Norfolk Broads area in evident as a lot of tourism is centred on driving; 43.2% of the respondents stated that they come to the Norfolk Broads to ‘drive around’. However, the fact this area lacks facilities for land-based activities (e.g. paths for walking or cycling), could be one reason why so many choose to drive (Broads Authority, 2006). A study conducted ten years ago by the National Centre for Social Research found that 1% of tourism day visits in the U.K. are based around cycling. However, it must be recognised that despite the fact that this figure appears very low, it amounts to 12.6 million tourism day trips per annum (Downward and Lumsdon, 2001). By 2001 there was already significant evidence showing that the demand for cycle tourism is increasing above this figure (Downward and Lumsdon, 2001).

There is a significant relationship between the frequency of visits to the Norfolk Broads area and whether visitors primarily drive in the area (Table 8). Visitors who come to the area frequently tend not to use driving as their primary method for transportation. People who do drive tend to visit the area more infrequently.
Table 8: Frequency of visits and driving

<table>
<thead>
<tr>
<th>Frequency of Visits</th>
<th>Count</th>
<th>If the respondent drives</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Frequent</td>
<td>24 (30.2)</td>
<td>46 (39.8)</td>
<td>70</td>
</tr>
<tr>
<td>Infrequent</td>
<td>39 (32.8)</td>
<td>37 (43.2)</td>
<td>76</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63</td>
<td>83</td>
<td>146</td>
</tr>
</tbody>
</table>

Sig. = 0.038

When the results presented in Tables 7 and 8 are compared, it is evident that there is a relationship between those who visit the area frequently (who are more likely to be local and do not drive) and those who visit the area infrequently (who are more likely to be non-local and drive). One of the main reasons for this could be if people come to visit the Norfolk Broads from outside of East Anglia, instead of taking more sustainable modes of transport, such as the train, they drive. If tourism increased in the area, in order to determine whether it would be sustainable would largely depend on whether it is more likely to attract locals or non-local visitors, or whether there is a potential for non-locals to change their primary method of transportation if the route is developed to minimise the impact that the transportation sector would have in this area, related to tourism.

Due to the fact that local tourists more frequently visit the area than tourists from outside East Anglia, the relationship between area of residence and the potential to increase the frequency of their visits as a result of the development of the 3RW was assessed (Table 9).

Table 9: Influence of area of residence and participating in walking as an activity on whether visitors would increase their visits to an area

<table>
<thead>
<tr>
<th>Walking</th>
<th>Increase Visits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No or Don’t Know</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>Observed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Expected)</td>
<td>49 (41.1)</td>
</tr>
<tr>
<td>Non Local</td>
<td>Observed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Expected)</td>
<td>16 (23.9)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>52</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>Observed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Expected)</td>
<td>3 (5.3)</td>
</tr>
<tr>
<td>Non Local</td>
<td>Observed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Expected)</td>
<td>8 (5.7)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>18</td>
</tr>
</tbody>
</table>

Sig (respondents who walk) = 0.002; sig (respondents who do not walk) = 0.077
Initially, no significant relationship was found. However, as layer variables were added the relationship did become significant: if walking is one of the activities that someone undertakes at the Norfolk Broads, and they are local, they will most likely increase the frequency of their visits to the area following the development of the 3RW.

4.4 Residents' opinions on the 3RW

In order to gauge the support of an increase in tourism by residents in the area, residents were asked if they believed the 3RW would increase tourism and whether they thought this increase would be negative or positive (Figure 9 and Figure 10).

![Figure 9: Whether residents believe that tourism would increase with the development of the 3RW](image)

![Figure 10: Whether residents think that the increase in tourism would be positive or negative](image)

The vast majority (98 or 73.6%) of respondents believed that the development of the 3RW would lead to an increase in tourism. Out of this number, 81.7% believed that this increase would be positive. This has a large influence on the potential for sustainable tourism as one of the aspects hindering the development of sustainable tourism in many areas are the negative social impacts that an increase in local tourism would potentially have. Literature has shown that residents are often opposed to an increase in local tourism due to some of the negative impacts that it could have on the area, such as congestion and noise (Budeanu, 2007)
In terms of congestion, if this were to increase in the Norfolk Broads, it could potentially lead to destroying qualities that the Norfolk Broads have to offer and the reasons that people come to the Broads \cite{The Countryside Agency, 2000}. One of the aspects presented in the 2005 Broads Authority survey that received the highest amount of support from the respondents was that “the area should be kept as natural as possible, with limited development” \cite[pg 32]{Broads Authority, 2006}. However, when looking at the results of the resident questionnaire, it is evident that there is support in the Broads area for the 3RW route as the majority of residents believe an increase in tourism resulting from the development of this route would be positive. The open questions at the end of the resident questionnaire allowed for residents to voice their views about the 3RW development in more detail. Some of the views that were highlighted by the residents who believed the 3RW would bring a positive increase in tourism to the area were:

- “more people would get out of cars and on bikes”
- “it would get people of diverse interests into the area”
- “people will walk to tourist attractions”
- “more tourists would come to enjoy our wonderful countryside”
- “it would encourage families to help the environment”

There was only one respondent of the resident survey who believed that there would be an increase in tourism and that it would be negative. They stated that there is the potential for there to be “more people, more vehicles and more litter”. The fact that they stated that there would be more vehicles comes back to the issue highlighted earlier: if there is an increase in tourism to the extent that it encourages an increase in the amount of tourists coming from other areas in the U.K. to the Norfolk Broads by car, this would ultimately be unsustainable despite the amount of sustainable activities they undertake during their stay, due to the impacts caused by driving to and from the area.

The residents who most strongly thought that there would be an increase in tourism were those located in the central zone \cite[sig. = 0.001]{}. The respondents of
the resident survey who live in the eastern or western zone were unsure or did not believe that the development of the route would increase tourism (Table 10).

Table 10: Influence of the area of residence on whether residents believe that there would be an increase in tourism

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Count</th>
<th>Believe there would be an increase in tourism</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No or Don't Know</td>
</tr>
<tr>
<td>Western Zone</td>
<td>Observed (Expected)</td>
<td>45 (45.7)</td>
<td>17 (16.3)</td>
</tr>
<tr>
<td>Central Zone</td>
<td>Observed (Expected)</td>
<td>30 (22.8)</td>
<td>1 (8.2)</td>
</tr>
<tr>
<td>Eastern Zone</td>
<td>Observed (Expected)</td>
<td>23 (29.5)</td>
<td>17 (10.5)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>98</td>
<td>35</td>
</tr>
</tbody>
</table>

Sig. = 0.001

From the 2005 Broads Authority survey, only 20-24% of respondents felt that there were too many boats and cars in the area (only 3-4% of the respondents felt really strongly about this) (Broads Authority, 2006). Therefore, it can also be argued that the Norfolk Broads area does have space to accommodate for increased tourism without resulting in the negative social impact of congestion.

4.5 Potential use of the 3RW by residents and visitors

This study concluded that the residents of the Norfolk Broads believed that the development would positively increase tourism in the area and therefore results from the visitor survey were evaluated in order to determine whether this increase in tourism would actually occur. Visitors were asked if the development would increase the frequency of their visits to the area (Figure 11), and just over half of the visitors said it would.
In both the resident and the visitor survey, there is evidence to show that there is support for the route as the majority of respondents (82.7% of the residents and 69.2% of visitors) were positive about using the route if it were to be developed (Figure 12).

The fact that in all three geographical zones of the Broads area, more residents said they would use the route if it were developed rather than saying they would not, shows a potential for an increase for recreational (residential) tourism. The vast majority of visitors (82% of the respondents who said they
would use the route) said that they would use the route for leisure purposes (Figure 13).

Figure 13: What visitors would use the 3RW for

66% of the 110 residents, who said that they would use the route, stated that they would use the route for leisure purposes (Figure 14). The fact that in both cases, there is a high demand for the use of the route for leisure purposes, shows that there is a great potential for tourism, both from visitors who come from outside of the Norfolk Broads area and local recreational tourists.

Some of the visitor’s views over the potential advantages of the 3RW were displayed through the open questions at the end of the questionnaire. Some of the most commonly discussed advantages were that certain areas of the Norfolk Broads would become “more accessible”, as there would be “easier access to more beautiful sites”. Following the opinions of the visitors, the 3RW has the potential to increase local tourism not only along the route, but also to tourist attractions that can be reached by the route. For example, one respondent of the visitor survey stated that the 3RW would provide “safer cycling for taking kids to Bewilderwood”, a local amusement centre for children. In accordance with the results presented in Figure 13, the development of the 3RW has the potential to “encourage more leisure cycling” for people to “enjoy the often unexplored areas
along this route”, including “other villages in this area of the Norfolk Broads”. However, there were visitors who also highlighted potential disadvantages. The main concern of the visitors seemed to be that the development of the 3RW might lead to “potential disruption to wildlife in areas”. In terms of an increase in tourism, one visitor stated the concern of, “Can local amenities cope (e.g. car parking, toilets etc)”. Another concern was, “if there are large numbers of cyclists and walkers along same of the little country routes, it could be that there are more accidents”. However, as can be seen from the results of the questionnaire, the majority of visitors and residents were positive about their potential use of the 3RW.

Table 11 presents the relationship that the majority of people who had heard of the route are located in the central or western zones (sig. =0.000). This is also related to the idea that the people who live in the western and central zones are more likely to use the route if it were to be developed (Table 12). And going back to residents’ support, those located in the central zone are more likely to think that the development of the 3RW would lead to an increase in tourism.

Table 11: Influence of area of residence on whether residents have heard of the 3RW

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Count</th>
<th>Heard of the 3RW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Western Zone</td>
<td></td>
<td>18 (12.1)</td>
<td>44 (49.9)</td>
</tr>
<tr>
<td>Central Zone</td>
<td></td>
<td>8 (6.1)</td>
<td>23 (24.9)</td>
</tr>
<tr>
<td>Eastern Zone</td>
<td></td>
<td>0 (7.8)</td>
<td>40 (32.2)</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>107</td>
<td>133</td>
</tr>
</tbody>
</table>

Table 12: Influence of area of residence on whether residents would use the 3RW

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Count</th>
<th>Would Use the 3RW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No or Don't Know</td>
</tr>
<tr>
<td>Western Zone</td>
<td></td>
<td>56 (51.3)</td>
<td>6 (10.7)</td>
</tr>
<tr>
<td>Central Zone</td>
<td></td>
<td>28 (25.6)</td>
<td>3 (5.4)</td>
</tr>
<tr>
<td>Eastern Zone</td>
<td></td>
<td>26 (33.1)</td>
<td>14 (6.9)</td>
</tr>
<tr>
<td>Total</td>
<td>110</td>
<td>23</td>
<td>133</td>
</tr>
</tbody>
</table>

Sig. = 0.001

Sig. = 0.002
Most commonly, the development of cycle routes occurs in the following stages: stage 1, application for funding; stage 2, land acquisition and route engineering; stage 3, publicity and stakeholder involvement (Downward and Lumsdon, 2001). The importance of stakeholder involvement is that it can tackle issues, such as social impacts, which are obscured by the more highly weighted economic and environmental impacts (Hardy et al., 2002). The lack of stakeholder involvement often leads to the route being developed on the basis of what the developers perceive to be what the users would want, which often does not match the actual demand (Downward and Lumsdon, 2001). When looking at the Cairngorms National Park Authority’s Core Paths Plan, the first step in their development process of the route was public engagement. This identified routes favoured by the public. Public consultation was then continued throughout the process, even after the routes had been selected and while they were being designed and developed (Cairngorms National Park Authority, 2009).

The way in which the 3RWA is undertaking the development of this route seems to be by doing the, above-mentioned, first and third stage simultaneously. They are currently searching for funding but at the same time doing widespread publicity through group membership opportunities and events (e.g. Big Bike Challenge in the nearby city of Norwich). However, as can be seen from the results presented in Table 8, 107 out of the 133 residents in the area have not heard of the 3RW project. This suggests that their publicity events need to aim at reaching a wider percentage of the local residents in order to more accurately take into consideration their views and opinions about the proposed route.

One of the fundamental issues ensuring the development of sustainable tourism in an area is to meet customer demand (e.g. to provide appropriate amount of information). One length of the U.K. NCN that is especially popular is the Coast to Coast (C2C) route that runs along North Sea coast (C2C guide, 2008). A study conducted by Cope et al. (1998), which monitored tourism on this route discovered that two of the main factors influencing the enjoyment of this
route was the amount of sign posting and the availability and quality of the maps and guides. Walkers and cyclists feel more comfortable using routes that are clearly signposted as it eliminates and elements of uncertainty \cite{Downward}. In reference to the fact that sign posting is one of the key factors contributing to popularity of the NCN, when a respondent of the visitor survey was asked if they perceive any disadvantages to the development of the 3RW, their response was, “no – but maintenance would need to be to a good standard and access to the countryside from the route encouraged. Up keep of information boards is essential”. However, despite the popularity of this section of the NCN, there are still a few problems hindering its ability function completely successfully as a route for sustainable tourism (i.e. lack of structured formal marketing and management) \cite{Cope}. 

4.6 Business Survey Respondents’ Characteristics

Figure 15, 16 and 17 display the overall information about the respondents of the business questionnaire.
There were a variety of businesses that responded to the questionnaire, ranging from restaurants and pubs to those in the service industry. The number of employees and each business’ length of season were used to get a better idea of the type of the overall types of businesses that responded.

Seasonality was looked at due to the types of impacts that seasonal tourism can have; primarily, there can be a surplus of resources during the low part of the tourist season, and a depletion of resources during the high part of the tourist season resulting from pressures put on the natural resources and local communities during times when there is high demand (VisitScotland, 2009). Although the Norfolk Broads is considered a seasonal tourist destination (Broads Authority, 2006), the majority of businesses that responded to the questionnaire are open year long. Therefore, it suggests that even though the Norfolk Broads have seasonal tourists, visitors do come out of season to participate in activities such as pike fishing and the increasing events available such as art exhibitions (Broads Authority, 2006). The results from the 2005 Broads Authority Survey showed 54% of visitors said that they would return to the Broads in the winter months to enjoy the “peace, quiet, nature and countryside” (Broads Authority, 2006; pg 35). Keyser (2002) emphasises that if the environmental and cultural resources that draw tourists to an area are degraded through overuse, the value of the destination will decrease, thus ultimately leading to a decrease in tourism.
As the winter months start to become milder, the Broads Authority’s tourism strategy (2006) highlights that one of their main objectives is to further extend the tourism season. However, in order to effectively extend the season, tourism needs to be sustainable in order to maintain it in the future.

4.7 Potential Economic Impacts

Among the highly rated activities that land-based visitors enjoyed undertaking in 2005 were eating and drinking in pubs and buying local products (Broads Authority, 2006). One of the reasons that rural tourism is largely being promoted by governmental initiatives is due to the fact that it has large potential to provide economic benefits to an area (Lane, 2005): attracting visitors who would not necessarily have come to the area otherwise, and encouraging them to stay longer (Bramwell and Lane, 2005).

55% of the respondents of the business questionnaire stated that they believed that the development of the 3RW would increase their customer numbers. Restaurants, pubs and retail businesses felt that their number of customers would remain the same while the businesses involved with tourism, services or the boatyards expected their customer numbers to increase (Table 13).

<table>
<thead>
<tr>
<th>Nature of Business</th>
<th>Change in Customer Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Same</td>
<td>More</td>
</tr>
<tr>
<td>Restaurant / Pub</td>
<td>1 (4.9)</td>
<td>10 (6.1)</td>
</tr>
<tr>
<td>Retail</td>
<td>7 (8)</td>
<td>11 (10)</td>
</tr>
<tr>
<td>Boatyard</td>
<td>6 (3.6)</td>
<td>2 (4.4)</td>
</tr>
<tr>
<td>Tourism</td>
<td>7 (5.8)</td>
<td>6 (7.2)</td>
</tr>
<tr>
<td>Services</td>
<td>8 (6.7)</td>
<td>7 (8.3)</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>36</td>
</tr>
</tbody>
</table>

Sig. = 0.045
The fact that all of the symmetric figures are over 0.03 suggests that this relationship is strong (Appendix 4). The open questions allowed businesses to discuss further advantages and disadvantages that they thought the 3RW might bring. Some of the advantages that the businesses highlighted were:

- “It would totally open up the business for a whole range of people walkers, cyclists etc, locals as well as holiday makers.”
- “It would open up so much more for people to cycle or walk and stop at Ludham Bridge and enjoy a cuppa with us.”
- “Customers request information on areas that they can walk and cycle to ‘enjoy a nice out and about’ would be good to have a dedicated route for this area.”
- “Safer to ride a bike from home to work.”

One business stated, the 3RW “would not benefit my business but it would certainly enhance my leisure time”, showing how the 3RW has a potential to increase to recreational tourism. There was only one business that stated a potential disadvantage that could result as a creation of the route: “Only concern is that there would perhaps be slightly more litter”. Therefore, from the results of the business questionnaire it is evident that the only economic impacts in the area, following the development of the 3RW, would be positive.

4.8 Transportation

The results of all three surveys present evidence to show that the main method of transportation around the Broads is by car. Figure 18 presents the percentage of customers and employees that businesses said come to and from their businesses by car. 40, or 52.3%, of the respondents of the business survey say that 75-100% of their employees travel to and from their respective business by car and 38, or 41.5%, of the businesses said that 75-100% of their customers drive. 67.1% (91 respondents) of visitors and 82% (109 respondents) of residents use driving as their primary method of transportation in the area (Figure 19).
Even though automobile use still remains high there are trends to show that the demand for more sustainable modes of transportation is starting to increase \cite{Lawson1998}. A visitors survey conducted in the U.K. in 1994 presented that around 80 million visits a year to the countryside are for cycling opportunities \cite{Cope1998}. From Figures 18 and 19, however, it is evident that car use is the primary mode of transportation for people in the Norfolk Broads.
area. As the tourism industry works like a market, in order for the demand to increase, supply needs to increase and the supply needed are facilities for people to be able to use alternative modes of transportation (e.g. routes such as the proposed 3RW could encourage more people to cycle or walk). The fact that walking is a much preferred activity than driving around, as was displayed in the results of the visitors survey, but driving is still the primary method of transportation suggests that people drive to and from walking routes. This comes back to the idea that a route, such as the proposed 3RW, can only be truly sustainable if it not only encourages the undertaking of sustainable activities (e.g. walking, cycling) but also encourages people to act sustainably around these activities (e.g. use sustainable modes of transport to get to and from the 3RW). This is especially relevant to non-local tourists as they would come from further a field.

Residents are more likely to use driving as their primary mode of transportation compared to visitors (Table 14). This could be due to the fact that the majority of visitors are local to East Anglia and therefore are able to come to the Norfolk Broads by train. This is especially true if they are visiting towns like Wroxham, which is located on a train line.

Table 14: Whether there is a difference between the primary mode of transportation used in the area between residents and visitors

<table>
<thead>
<tr>
<th></th>
<th>Primary mode of Transportation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Car (Expected)</td>
<td>Other</td>
</tr>
<tr>
<td>Resident</td>
<td>109 (98.7)</td>
<td>24 (34.3)</td>
</tr>
<tr>
<td>Visitor</td>
<td>98 (108.3)</td>
<td>48 (37.7)</td>
</tr>
<tr>
<td>Total</td>
<td>207</td>
<td>72</td>
</tr>
</tbody>
</table>

Residents might have to primarily use cars in order to access amenities and facilities in the area due to the lack of suitable cycle and walking ways that could be used between the villages (Broads Authority, 2006). Despite the fact that residents are more likely to use driving as their primary mode of transportation in
the area, they are also more likely to use the route if it were to be built than visitors are (Table 15).

### Table 15: If there is a relationship between whether someone would use the 3RW and if they are a resident or visitor

<table>
<thead>
<tr>
<th></th>
<th>Use the 3RW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No or Don’t Know</td>
</tr>
<tr>
<td>Resident</td>
<td></td>
<td>110 (100.6)</td>
</tr>
<tr>
<td>Visitor</td>
<td></td>
<td>101 (110.4)</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>68</td>
</tr>
</tbody>
</table>

Sig. = 0.009

This presents the importance of accessibility and how the 3RW has the potential to increase recreational tourism. Visitors who stated that they would use the 3RW if it were developed, said that they would change their primary mode of transportation from driving to a more sustainable option (Table 16). The symmetric measures are over 0.03 suggesting that this is a strong relationship (Appendix 4).

### Table 16: If there is a relationship between whether someone would change their primary mode of transport and if they would use the 3RW

<table>
<thead>
<tr>
<th>Change Mode of Transport</th>
<th>Use the 3RW</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No or Don’t Know</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td>33 (33.9)</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>50 (38.7)</td>
</tr>
<tr>
<td>No</td>
<td>18 (28.4)</td>
<td>23 (12.6)</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
<td>45</td>
</tr>
</tbody>
</table>

Sig. = 0.000

Therefore, as a conclusion to the information presented in tables 14, 15 and 16, it is evident that residents are more likely to use driving as their primary mode of transportation, but are also most likely to use the route. However, if the route was developed, visitors who do drive in the area would most likely change their primary mode of transportation to another method which is more sustainable. The high demand for the route by both visitors and residents suggests a potential increase in tourism by visitors and recreational tourism by residents.
5. Conclusion and Recommendations

The potential for sustainable tourism along the 3RW, a proposed 7.5 mile route connecting four villages in the Norfolk Broads national park, depends mainly on the methods used to develop, manage and promote the route and growth of tourism in the area. Looking at previous examples of similar routes that have been developed suggests that multi-purpose routes designed for walking and cycling are in high demand in the U.K. (Sustrans, 2009). In order to sustain demand for the route, developers need to evaluate the views of the potential users in order to be able to develop the route to meet their demand (Downward and Lumsdon, 2001).

The potential for tourism along the 3RW, along with an increase in tourism on the Norfolk Broads, would be high due to the fact that there is a considerable demand for walking facilities in this area (Broads Authority, 2006). A questionnaire conducted in 2005, along with this study, show that the majority of visitors walk in the area and demand more facilities for this activity (Broads Authority, 2006). Residents are positive about using the potential 3RW for leisure activities, which suggests a potential for an increase in recreational tourism. The highest demand for the 3RW stems from local tourists (from within East Anglia) who are interested in using the 3RW for walking.

This study assessed the demand of the relevant stakeholders (businesses, visitors and residents) through questions presenting a hypothetical situation: what their views and actions would be with the presence of the 3RW. Due to the issue of social desirability bias, their actions in the future (once the 3RW is developed) might not reflect their current attitudes. The scope of this study covered the demand for the 3RW and the potential impacts of that demand, but not the reasons for the demand. A future study could look at the reasons for the demand, both at the individual and societal scale, to assess the broader reasons for the potential demand of the 3RW.
The use of cars in the area was one of the major highlights in the study as all three of the questionnaires showed that a high percentage of people in the area drive. One of the key factors in determining whether the 3RW development would lead to sustainable tourism is if it would encourage a change to the use of more sustainable modes of transportation. In order to truly achieve sustainable development, however, transportation used to get to and from the tourism destination is just as important as the transportation used within it (Downward and Lumsdon, 2001). As one end of the 3RW starts by the Hoveton and Wroxham train station, there is a potential for people to visit the area by train and then use the route to cycle and walk around the area. A future study should look in more detail at the mode of transportation used by visitors to travel to and from the Norfolk Broads, and the potential for visitors to change this mode of transportation as well as their primary mode of transportation within the area.

In conclusion, a potential for sustainable tourism along the proposed 3RW on the Norfolk Broads seems conceivable. The environmental impacts, as suggested by the feasibility study, are said to be very minimal as long as the construction and use of the route follows guidelines which restrict the disturbance of local habitats. The economic impacts following the development of the 3RW are positive: it would bring a larger amount of customers to the area, which could in turn help to fulfil one of the Broads Authorities’ (2006) objectives of extending the tourist season further into the winter. However, in order to get a clearer view on the potential economic impacts of the route, a more detailed study could be undertaken using methods such as contingent valuation or a cost-benefit analysis (Dixon and Sherman, 1990). The majority of residents were in favour of there being an increase in tourism as they perceived that it would be positive. The balance of the potential impacts of these three elements advocates the potential for sustainable tourism. However, there are key points highlighted throughout this study (e.g. the availability of information to visitors through means such as signposting and the use of sustainable transport to travel to and from the route) that need to be taken into consideration in order to ensure that sustainable tourism is successfully achieved and maintained in the area.


Appendix 1 – Business Questionnaire

Proposed 7 ½ mile route for cyclists and walkers linking Potter Heigham, Ludham, Horning and

This survey aims to assess the potential impact that the Three Rivers Way route may have upon local businesses. It should take less than 10 minutes to complete. Responses will be kept confidential and no one individual or business will be mentioned in any published work that might be produced as a result of this questionnaire.

1) **Name of business** .......................................................... Postcode:

2) **Nature of business** ......................................................

3) **Length of season** (e.g. Mar-Sept ) ..............................

4) **Number of employees** Full time ...... Part time ......

5) Approximately what percentage of your current customers use the following modes of transportation?
   
   i) **Car** ......
   ii) **Walk** ......
   iii) **Cycle** ......
   iv) **Bus** ......
   v) **Boat** ......
   vi) **Other (please specify)** .................................................................

6) If the Three Rivers Way route is built, how would you expect customer numbers to change? *(Please tick one box only)*
   
   □ Fewer
   □ About the same
   □ Slightly more
   □ Many more

7) If the Three Rivers Way route is built would you expect spending per customer to be: *(Please tick one box only)*
   
   □ Less
   □ About the same
   □ Slightly more
   □ Much more

8) Would these changes impact on your business? *(Please tick one box only)*

   □ Yes
   □ No

   i) If yes, would there be an opportunity to: *(Please tick all boxes that apply)*
   
   □ extend the season
   □ diversify
   □ increase number of people employed
   □ Other (please specify) .................................................................
9) How do your employees usually get to work? Please indicate the number of employees for each method of transportation:
   i) Car ……
   ii) Walk ……
   iii) Cycle ……
   iv) Bus ……
   v) Boat ……
   vi) Other (please specify)………………………………………………………………..

10) If the route is built, are any of your employees who drive to work likely to change to walking or cycling?

   □ Yes
   □ No

   i) If so, please indicate how many: …………..

11) Do you see any possible disadvantages to your business as a result of the development of the Three Rivers Way route?

12) What other advantages, in addition to those mentioned above, would the creation of the Three Rivers Way route bring to your business?
Appendix 2 – Visitor Questionnaire

Visitors on the Three Rivers Way proposed route (2009)

My name is Corinna Luther (UEA MSc student) and I am doing a study on the proposed Three Rivers Way (a 7 ½ mile route for cyclists and walkers linking Potter Heigham, Ludham, Horning and Hoveton/Wroxham). This study aims to assess the potential for sustainable tourism as a result of the development of this route. In order to evaluate the views of current visitors to the area, I would be grateful if you could fill out this questionnaire. All responses will be kept anonymous.

Demographics:

1) Age (please tick one box):
   - □ Under 18
   - □ 19-25
   - □ 26-40
   - □ 41-65
   - □ Over 65

2) Area of residence (please tick one box):
   - □ Norfolk
   - □ East Anglia
   - □ U.K.
   - □ Europe
   - □ Outside Europe

3) Gender (please tick one box):
   - □ Male
   - □ Female

Visiting the area:

4) How often do you visit the area? (please tick one box)
   - □ Once a week
   - □ Twice a month
   - □ Once a month
   - □ Once every 3 months
   - □ Once every 6 months
   - □ Once a year
   - □ Less than once a year

5) What activities do you undertake when visiting the area? (please tick all that apply)
   - □ Walking
   - □ Cycling
   - □ Driving around
   - □ Boating/Sailing
   - □ Fishing
   - □ Bird Watching
   - □ Visiting sites of cultural interest
   - □ Other (please specify)__________________
6) What is your main method of transportation in and around the area? (please tick one box)
   □ Car
   □ Bike
   □ Boat
   □ Walking
   □ Train
   □ Other (please specify)________________

Three Rivers Way (3RW):
7) If you primarily drive in the area, would the route encourage you to use other methods of transportation? (e.g. cycling or walking) (tick one box)
   □ Yes
   □ No
   □ Don’t know
   □ N/A

8) If the 3RW was developed, would you use the route? (please tick one box)
   □ Yes
   □ No
   □ Don’t know

   i) If yes, what would you use the route for?
      □ Leisure (e.g. cycling, walking)
      □ Access to amenities, facilities (e.g. hospitals, shops, pubs)
      □ To travel between the villages

9) If the route was available, would this encourage you to visit the area more often? (tick one box)
   □ Yes
   □ No
   □ Don’t know

10) Do you see any potential disadvantages of the development of the 3RW?
    ___________________________________________________
    ___________________________________________________
    ___________________________________________________
    ___________________________________________________

11) Do you see any potential advantages of the development of the 3RW?
    ___________________________________________________
    ___________________________________________________
    ___________________________________________________
    ___________________________________________________

Thank you for taking your time to complete the questionnaire.
Appendix 3 – Resident Questionnaire

Residents on the Three Rivers Way proposed route (2009)

My name is Corinna Luther (UEA MSc student) and I am doing a study on the proposed Three Rivers Way (a 7 1/2 mile route for cyclists and walkers linking Potter Heigham, Ludham, Horning and Hoveton/Wroxham). This study aims to assess the potential for sustainable tourism as a result of the development of this route. In order to evaluate the views of residents in the area, I would be grateful if you could fill out this questionnaire. All responses will be kept anonymous.

Demographics:
1) Age (please tick one box):
   □ Under 18
   □ 19-25
   □ 26-40
   □ 41-65
   □ Over 65

2) Area of residence (closest village) (please tick one box):
   □ Wroxham
   □ Hoveton
   □ Horning
   □ Woodbastwick
   □ Ludham
   □ Potter Heigham
   □ Ranworth
   □ Salhouse

3) Gender (please tick one box):
   □ Male
   □ Female

4) How long have you been a resident in the area (please tick one box)?
   □ <5 years
   □ 5-10 years
   □ 10-15 years
   □ 15-20 years
   □ >20 years

Three Rivers Way (3RW):
5) Have you heard of the Three Rivers Way (3RW)?
   □ Yes
   □ No

5) What is your primary mode of transportation within the area? (Please tick one box)
   □ Car
   □ Bike
   □ Walking
6) If you primarily drive, would the development of the 3RW encourage you to change your primary mode of transportation (e.g. cycling or walking)?

☐ Yes
☐ No
☐ Don’t Know

7) If the 3RW was developed, would you use the route? *(please tick one box)*

☐ Yes
☐ No
☐ Don’t know

i) If yes, what would you use the route for?

☐ Leisure (e.g. cycling, walking)
☐ Access to amenities, facilities (e.g. hospitals, shops, pubs)
☐ To travel between the villages

8) Do you believe that the development would increase the amount of tourists in the area *(please tick one box)*?

☐ Yes
☐ No
☐ Don’t know

i) If yes, do you think that this will be an overall positive or negative impact to the area?

☐ Positive
☐ Negative
☐ Don’t know

a) If positive, what do you think are the potential advantages to increased tourism in the area?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

b) If negative, what do you think are the potential disadvantages to increased tourism in the area?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you for taking your time to complete the questionnaire.
### Appendix 4 – Symmetric Measures for Statistical Analyses

#### Table 7: Area of Residence and Frequency of Visits (from page 30)

<table>
<thead>
<tr>
<th>Area of Residence</th>
<th>Frequency of Visits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequent</td>
<td>Infrequent</td>
</tr>
<tr>
<td>Local</td>
<td>Observed (Expected)</td>
<td>56 (42.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14 (27.8)</td>
</tr>
<tr>
<td>Non Local</td>
<td>Observed (Expected)</td>
<td>56 (42.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14 (27.8)</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>76</td>
</tr>
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<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Squared</td>
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<td>0.000</td>
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<tr>
<td>Phi</td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>Cramer’s V</td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>0.361</td>
<td></td>
</tr>
</tbody>
</table>

#### Table 13: Influence of the nature of a business on whether they believe customer numbers would change (from page 44)

<table>
<thead>
<tr>
<th>Nature of Business</th>
<th>Change in Customer Numbers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant / Pub</td>
<td>Observed (Expected)</td>
<td>1 (4.9)</td>
</tr>
<tr>
<td>Retail</td>
<td>Observed (Expected)</td>
<td>7 (8)</td>
</tr>
<tr>
<td>Boatyard</td>
<td>Observed (Expected)</td>
<td>6 (3.6)</td>
</tr>
<tr>
<td>Tourism</td>
<td>Observed (Expected)</td>
<td>7 (5.8)</td>
</tr>
<tr>
<td>Services</td>
<td>Observed (Expected)</td>
<td>8 (6.7)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Squared</td>
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<td>0.045</td>
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<tr>
<td>Phi</td>
<td>0.387</td>
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<tr>
<td>Cramer’s V</td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>0.361</td>
<td></td>
</tr>
</tbody>
</table>

#### Table 16: If there is a relationship between whether someone would change their primary mode of transport and if they would use the 3RW (from page 48)

<table>
<thead>
<tr>
<th>Change Mode of Transport</th>
<th>Use the route</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Yes</td>
<td>33 (33.9)</td>
</tr>
<tr>
<td></td>
<td>No or Don’t Know</td>
<td>50 (38.7)</td>
</tr>
<tr>
<td>Yes</td>
<td>Observed (Expected)</td>
<td>18 (28.4)</td>
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<tr>
<td>No</td>
<td>Observed (Expected)</td>
<td>101</td>
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<tr>
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<th>Value</th>
<th>Level of Significance</th>
</tr>
</thead>
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<tr>
<td>Phi</td>
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</tr>
<tr>
<td>Cramer’s V</td>
<td>0.397</td>
<td></td>
</tr>
<tr>
<td>Contingency Coefficient</td>
<td>0.369</td>
<td></td>
</tr>
</tbody>
</table>