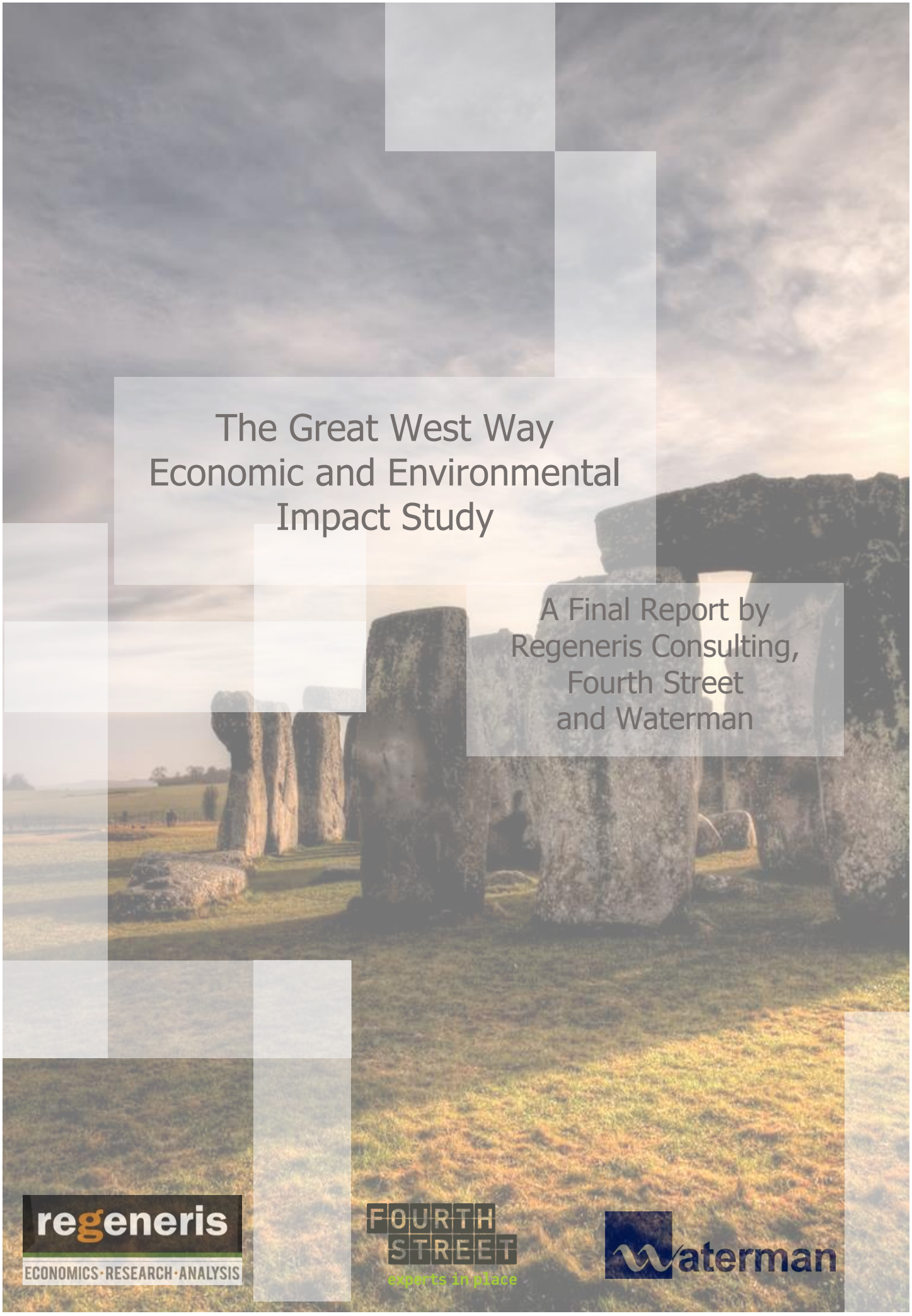

The Great West Way Economic and Environmental Impact Study

A Final Report by Regeneris Consulting, Fourth Street and Waterman

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Waterman

The Great West Way Economic and Environmental Impact Study

March 2017

Regeneris Consulting Ltd
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Executive Summary

A compelling proposition…

i. VisitWiltshire has received funding from Phase 1 of the Discover England Fund (DEF) to support the development of the Great West Way touring route. To help inform ongoing project development, VisitWiltshire commissioned Regeneris Consulting, together with Fourth Street and Waterman, to undertake an economic impact and environmental assessment of the proposed route.

ii. The Great West Way offers a compelling proposition to strengthen England's regional tourism offer and spread the benefits of tourism across the country. The touring route will be multi-modal, and will encourage visitors to take their time as they explore new trails and itineraries. It has the potential to be a real game changer in the marketplace, offering a new joined up way of working where destinations and businesses can work together, share knowledge and jointly benefit from an uplift in visitor numbers.

…to meet national and local objectives…

iii. The route concept provides strong synergy with national, regional and local strategies. It directly addresses current regional tourism imbalances, encouraging greater levels of spend outside of the Capital City. It will offer significant economic benefits at both a national and local level, by strengthening the regional visitor economy and ensuring local businesses can capitalise on new opportunities. The route also has the potential to send positive signals to the market, encouraging greater levels of investment and acting as a catalyst for new development.

…with the potential to generate significant economic benefits…

iv. Case study analysis of similar touring routes around the world evidence the significant impact these tourism initiatives can have on the economy. Similar routes developed in Ireland (The Wild Atlantic Way), Scotland (The North Coast 500) and England (The South West Coastal Path) have experienced significant uplifts in visitor numbers since their launch. The uplift in visitor spend and resulting economic benefits have far outweighed the costs involved, with estimated benefit to cost ratios of between 7 and 13 across similar routes.

v. Our analysis has looked at the level of uplift in visitor numbers needed to justify investment. We have focussed on the potential economic impact of the Great West Way, assuming that £2.4m upfront cash funding is received. This funding excludes any form of non-cash support and any additional cash support above the DE fund requirements. For the route to generate a benefit to cost ratio of between 7 and 13 over a 10-year period, it will need to attract between 0.8m – 1.5m additional visitors, spending an average of £10.5m - £19.6m per year. Over a 10-year investment period, between 1,900 – 3,500 jobs and £70m - £140m economic uplift could be created. However, in reality the impacts are likely to be significantly greater than this as the initial investment is leveraged to boost both the international, and also the domestic tourist market.

vi. In addition, we looked at the potential for the route to generate wider economic and community benefits. For example, the Great West Way has the potential to stimulate investment in new visitor, restaurant and hotel facilities, with the potential to create up to 50 direct and 40 indirect jobs per hotel. The route also has the potential to generate significant PR value through targeted media visits.

…by capitalising on untapped market potential.

vii. Our analysis suggests that a benefit to cost ratio of between 7 and 13 would be very achievable for the Great West Way. In 2015, over 9 million international leisure tourists didn't venture outside of London during their stay in England and only 24% of repeat leisure tourists ventured into regional England. These markets both represent an opportunity to increase visitor numbers into regional England, with the potential to generate visitor numbers that would far exceed those needed to generate a BCR of 7-13. However, whilst the Discover England fund is focussed on the international market, it is important to also consider the domestic market. Evidence from similar touring routes across the UK suggest that the local economy will also benefit through positive spill-over effects from the domestic tourism market as a result of the routes development.

But this proposition is about more than just increased tourist visits….

viii. An effective tourism strategy can affect more than just tourist visits and expenditure. It can also affect market perceptions and inward investment. In place marketing terms, it is often the tourism infrastructure, product and brand that can make the difference between an inward investment deal that closes and one that doesn't. The Great West Way is expected to have a material effect on the way that the surrounding areas are perceived; not just by the tourists that visit, but also by the people that work there, the people that live there and, critically, by those people making decisions about where to live, work and locate their businesses.

…and is already generating business interest…

ix. As the Great West Way route develops it will increasingly influence investment decisions and act as a catalyst for wider investment. The route has already influenced one developer in Maidenhead. While the developer's initial plan included affordable workspace for digital industries to capitalise on the 'Silicon corridor' imagery, their proposal has now been narrowed to digital businesses serving the travel trade, as a result of the Great West Way initiative being announced.

x. Elsewhere, the Wild Atlantic Way has attracted new food and drink outlets to the area, with one café naming itself the 'Wild Atlantic Café'. Local councils have responded positively to the new route with €400,000 being reserved for improving visitor facilities at Malin Head. Along the North Coast 500, improvements are already being made to visitor accommodation as a direct result of the route with a £140,000 investment programme launched at The Torridon Hotel.

…a carefully considered approach will ensure success.

xi. The proposed route corridor contains many established tourist 'attractions', together with other destinations that could be managed more positively as part of an integrated strategy. There are environmental issues associated with managing extra visitor numbers within 'honeypot' locations including traffic congestion, air pollution, litter and visual impacts. There are also potential risks to ecological species and habitats, together with sites of geological interest. In order to mitigate against these issues, the Great West Way will need to promote round the year tourism to reduce the effects associated with the peak season and encourage visitors to explore lesser-known attractions to relieve pressure on more popular areas. Promotion of multi-modal transport strategies will ensure convenient linked routes and reduce traffic congestion and vehicle emissions.

xii. VisitWiltshire has already received significant positive feedback and support for the route from both public and private sector partners. Careful market analysis, a compelling offer, a strong brand

and the promotion of a more joined up approach will ensure that the Great West Way is a success for both the national and local economy.

1. The purpose of this report

1.1 VisitWiltshire has received funding from Phase 1 of the Discover England Fund (DEF) to support the development of the Great West Way touring route. To help inform ongoing project development, VisitWiltshire commissioned Regeneris Consulting, together with Fourth Street and Waterman, to undertake an economic impact and environmental assessment of the proposed route.

1.2 The economic assessment contained within this report aims to provide estimates of potential economic impact along the route. It uses case study evidence from other touring routes to identify potential costs, benefits and funding opportunities. Given the relative infancy of the project, scenario tests have been carried out to assess the uplift in visitors needed to produce a range of positive benefit to cost ratios, depending on different input assumptions. The economic assessment also considers the opportunity to influence wider growth and regeneration opportunities along the route, recognising that it will not just be local tourism businesses that will benefit from the investment.

1.3 The environmental assessment identifies considerations, risks and mitigating actions along the route and identifies priorities for further research and activity.

2. Strategic context

Introducing the Great West Way

2.1 VisitWiltshire has received funding from Phase 1 of the Discover England (DE) fund to support the development of the Great West Way touring route. Following VisitWiltshire's expression of interest in Phase 2 funding, the organisation has been invited to apply for further funding by April 2017.

2.2 The DE fund is focussed on promoting inbound tourism into England. In particular, it is focussed on spreading the benefits of tourism across England and encouraging visitors to explore lesser known regions and attractions. The fund has been designed to support product development, aimed at meeting the wants and needs of international consumers.

2.3 The Great West Way is seeking funding to strengthen regional tourism and develop innovative ways of joining up the existing tourism offer.

2.4 The Great West Way proposition aims to provide tourists with an authentic local experience, encouraging visitors to explore both well-known and lesser-known attractions. Alongside the iconic attractions, the route itineraries will offer beautiful English countryside to explore, quaint towns and villages to discover and new experiences to undertake. The route will act as its own standalone product, driving increased tourist numbers directly into regional England as well as expanding the awareness of England's tourism offer beyond London.

> The proposed touring route offers a unique opportunity to join up iconic attractions and hidden gems to deliver a compelling proposition to draw visitors into regional England.

Significant geographical imbalances are limiting impact

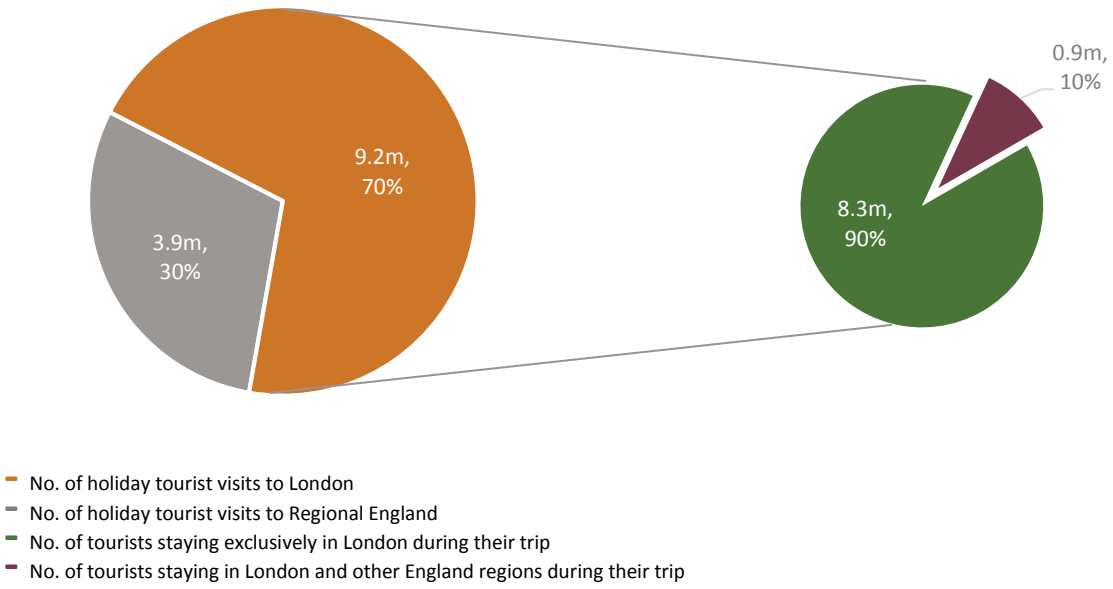
2.5 The tourism industry provides 1.6 million jobs across the country. In 2015, the UK saw the greatest number of overseas visits on record, bringing £22.1 billion into the economy. Domestic overnight spend also hit a record high of £19.6 billion in England.

2.6 Since 2002, holiday trips to England by overseas visitors have increased by 83%, and nights spent in England by 46%. However, this has largely been driven by trips to London, which have grown by 89% compared to 52% for trips outside London. Some progress has already been made to rebalance the geographical impact of this sector, but more needs to be done to spread the benefits of tourism across the country.

2.7 In 2016, VisitEngland published research that explored the percentage of international visitors who venture beyond London during their trip. They found that only 9% of those entering the country via London, stayed at least one night elsewhere. Interestingly, those using the regional gateways such as Bristol airport are more likely to stay in the local area with 86% of tourists entering through these airports, staying in regional England.

2.8 Figure 2.1 focuses on tourists coming to England purely for a holiday. Only 10% of tourists visiting London for holiday purposes, also explore wider England Regions during their trip. This data supports the findings by VisitEngland and London and Partners.

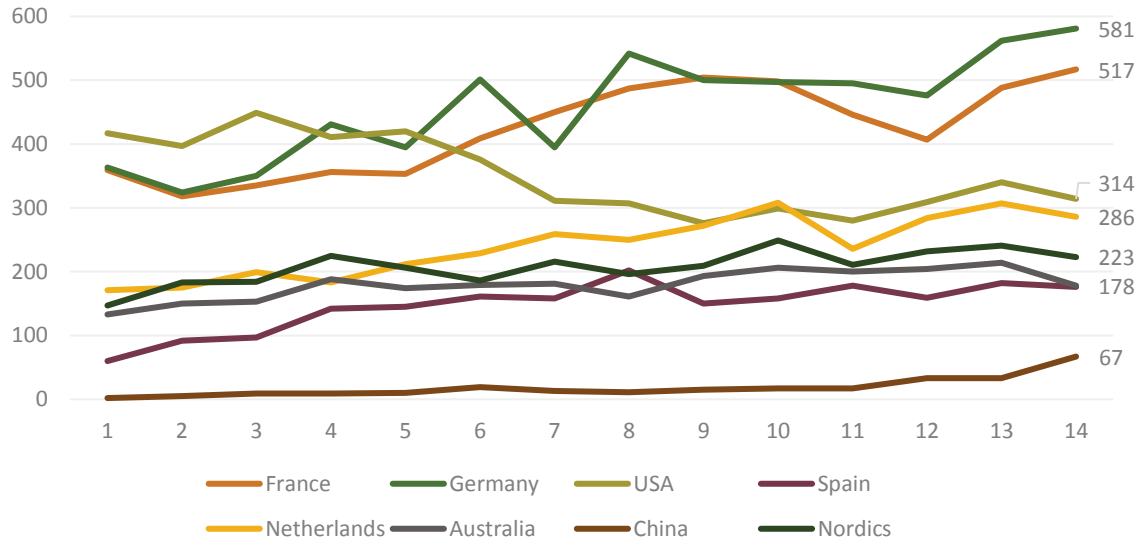
Figure 2.1 Inbound Holiday Tourists by Destination in England, 2015



Source: IPS 2015, Regeneris Consulting

2.9 Of those overseas holiday-makers bypassing London and instead spending their stay in regional England, most are likely to be from Germany, followed by France, the USA and the Netherlands. It is likely that this group is largely made up of visitors who have already visited England at least once before given over 70% of first time visitors to England focus on visiting the capital City. The Great West Way will help to address these geographical imbalances by drawing visitors directly into regional England and also acting as a draw for visitors away from London, especially for those who have already visited England before.

Figure 2.2 Holiday Trips to Regional England (outside London) by Target Market (000s)



Source: IPS

Rich history, culture and landscapes entice visitors

2.10 London and Partners research found that those who travel beyond London tend to be more attracted to history and heritage than those who spend their entire time in London and who in turn place a higher importance on shopping. The key themes that act as hooks for travelling beyond London and how they relate to the Great West Way are set out in Table 2.1.

Table 2.1 Hooks for travelling beyond London

Theme	Explanation	Link to The Great West Way
Heritage & History	The most common reason for going beyond London (given by 81%) was that Britain has history spread across the country	Iconic historical attractions incl. Stonehenge, Avebury, Highclere, Lacock
Countryside	78% of those going beyond London gave Britain's unique and beautiful countryside as a reason for travel.	3 AONBs along the route
Uniqueness and Variety	80% of those that went beyond London said they did so because of Britain's diverse regions and unique places to stay	Diverse route spanning seven regional counties
British people and way of life	70% of travellers beyond London wanted to meet British people and see the British way of life	An authentic experience with the opportunity to live like a local
Cities and culture	Britain's fun and vibrant cities were flagged as a factor which might persuade people to outside London.	Opportunity to explore historic and cultural cities incl. Bristol and Bath
Trains, tours & packages	Most are willing to travel 2-3 hours from their initial base to stay in another destination. Preference is for train travel.	Rail-line along the route. Opportunity to purchase integrated rail pass

A compelling proposition to rebalance tourism

2.11 The development of the Great West Way touring route is being led by VisitWiltshire with support from a range of relevant partners and stakeholders.

2.12 The route aims to encourage a joined-up approach among some of England's most iconic attractions and destinations. Every attraction and destination along the route has a similar objective: *to attract and maintain a sustainable numbers of tourists in order to remain competitive in the marketplace*.

2.13 The route will offer the opportunity for international visitors to book inspiring itineraries at the click of a button. The goal is to ensure a range of destinations along the route will benefit, not just the familiar and iconic attractions. This will maximise both the interest for users and the economic spin-offs for settlements and businesses along the route.

The Great West Way offers a new joined up way of working, where destinations can work together, share knowledge and jointly benefit from an uplift in visitor numbers.

2.14 The touring route is multi-modal, and will encourage visitors to take their time as they explore trails and itineraries, linger longer, and discover the route in depth. The route will give tourist's an authentic local experience, changing perceptions of what it means to be

British and the wealth of experiences beyond London. Although the whole London to Bristol route is only approx. 125 miles, the wider concept embraces over 500 miles of route way.

10 Route Objectives

1) Generate short- medium- and long-term additional tourism visits and spend, increase dwell time and achieve high satisfaction along, and around, all parts of the route.

2) Improve linkages between a range of attractions and activities

3) Use smart destination technology to provide an innovative virtual signage and interpretation solution.

4) Improve private and public transport and other visitor-related infrastructure along and around the route.

5) Direct visitors to less-visited areas by creating branded itineraries and experiences along and around the route.

6) Increase growth, productivity and partnership working via a programme that encourages stakeholders and businesses to work together on a single compelling proposition that brings benefits to all.

7) Increase and improve the quality and range of product, for example attracting new accommodation in areas where supply is low.

8) Work with the trade to ensure bookable product is available in target domestic and international markets.

9) Be a major catalyst for change.

10) Create something new and exciting to add to England's existing offer.

A Strong Strategic fit to meet national and local objectives

2.15 The Great West Way presents both an exciting and challenging prospect. It has the potential to be a real game changer within the regional tourism market[1], attracting visitors to discover England's real hidden gems. It will offer significant benefits to those travelling the route, but also to local businesses and communities along the Way.

2.16 Implementation of the route will be both a bottom-up and top-down process involving a wide range of national, regional, sub regional, and local partners, funders, businesses and local communities. The route concept provides strong synergy with national, regional and local strategies. These strategies have been grouped into key theme areas of specific relevance to the route below.

[1] The Great West Way Case Study Analysis, Team T, November 2016

Table 2.2 Strategic Fit

Theme and Strategic Fit	Relevant Strategies Policies
Geographical Tourism Imbalances	
✓ Encourage tourists to travel outside of the Capital ✓ Increase tourism spend outside London ✓ Support a more joined up approach across regions	• Tourism Action Plan, DCMS, 2016 • Backing the Tourism Sector: a five-point plan, DCMS, 2015 • Understanding the London + Visitor, London & Partners, 2015
Visitor Economy Jobs and Skills Development	
✓ Maximise the economic benefits of tourism ✓ Support the development new job opportunities and inward investment ✓ Deliver education and training to support the visitor economy ✓ Promote strategies which extend the visitor season	• Tourism Action Plan, DCMS • Backing the Tourism Sector: a five-point plan, DCMS, 2015 • The Visitor Economy: A potential powerhouse of local growth, Local Government Association, 2015 • Sector Skills insights: Tourism, UKCES, 2012
Sustainable Economic Development and Place-Making	
✓ Support the regeneration of places through tourism initiatives ✓ Improve public realm and access to open spaces ✓ Support and invest in cultural and heritage attractions	• Strategic Economic Plans for Wiltshire & Swindon LEP, West of England LEP, Buckinghamshire Thames Valley LEP, Gloucestershire LEP • The Rural Challenge, The Rural Coalition, 2014
Joined Up Approach to Sustainable Transport	
✓ Integrate local transport networks and improve connectivity ✓ Promote joined up ticketing approaches ✓ Improve the use of the rail network by tourists ✓ Promote and provide for non-motorised travel ✓ Integrate networks of continuous walking and cycling routes ✓ Promote the use of waterways	• Backing the Tourism Sector: a five-point plan, DCMS, 2015 • Joining up Transport, Dft & Baroness Kramer, 2015 • Cycling and Walking Strategy, Dft, 2016 • Active Travel Strategy Guidance, Sustrans, 2014 • Canal and River Trust 10 Year Strategy, 2015 • Sport England, Towards and Active Nation Strategy, 2016-2020
Countryside Recreation and Natural Heritage	
✓ Invest in recreational infrastructure ✓ Conserve and enhance natural heritage ✓ Protect, enhance and encourage use of public rights of way ✓ Increase opportunities to understand and benefit from natural environment ✓ Identify, protect and maintain man made and historic features	• The Rural Development Programme 2014-2020, DEFRA, 2015 • Local Rights of Way Improvement Plans • Heritage 2020: strategic priorities for England's historic environment 2015-2020 • Sport England, Towards and Active Nation Strategy, 2016-2020

Support from all sectors

2.17 VisitWiltshire has already received significant positive feedback and support for the route. The following have confirmed their support verbally or in writing for the project, including contributing cash or in-kind support.

- Destination Organisations including VisitWiltshire, VisitDevon, Bath Tourism Plus, Destination Bristol, Visit Cornwall, Visit Somerset, Cotswolds Tourism, Windsor & Maidenhead, Tourism South East, Experience Oxfordshire)

- North Wessex Downs AONB, Cotswolds AONB, Salisbury & Avebury World Heritage Site
- Local Enterprise Partnerships – letters of support received from Swindon & Wiltshire LEP, West of England LEP, Buckinghamshire Thames Valley LEP. Oxfordshire LEP, Berkshire Thames Valley LEP and the Gloucestershire LEP.
- Town councils, BIDs and parish councils including Hungerford, Corsham, Calne, Marlborough, Chippenham
- Sustrans, Kennet & Avon Canal, Canals & River Trust, English Heritage, National Trust, Churches Conservation Trust, UKInbound, ETOA, Wilts & Berks Canal.

2.18 Industry partners who have expressed support include:

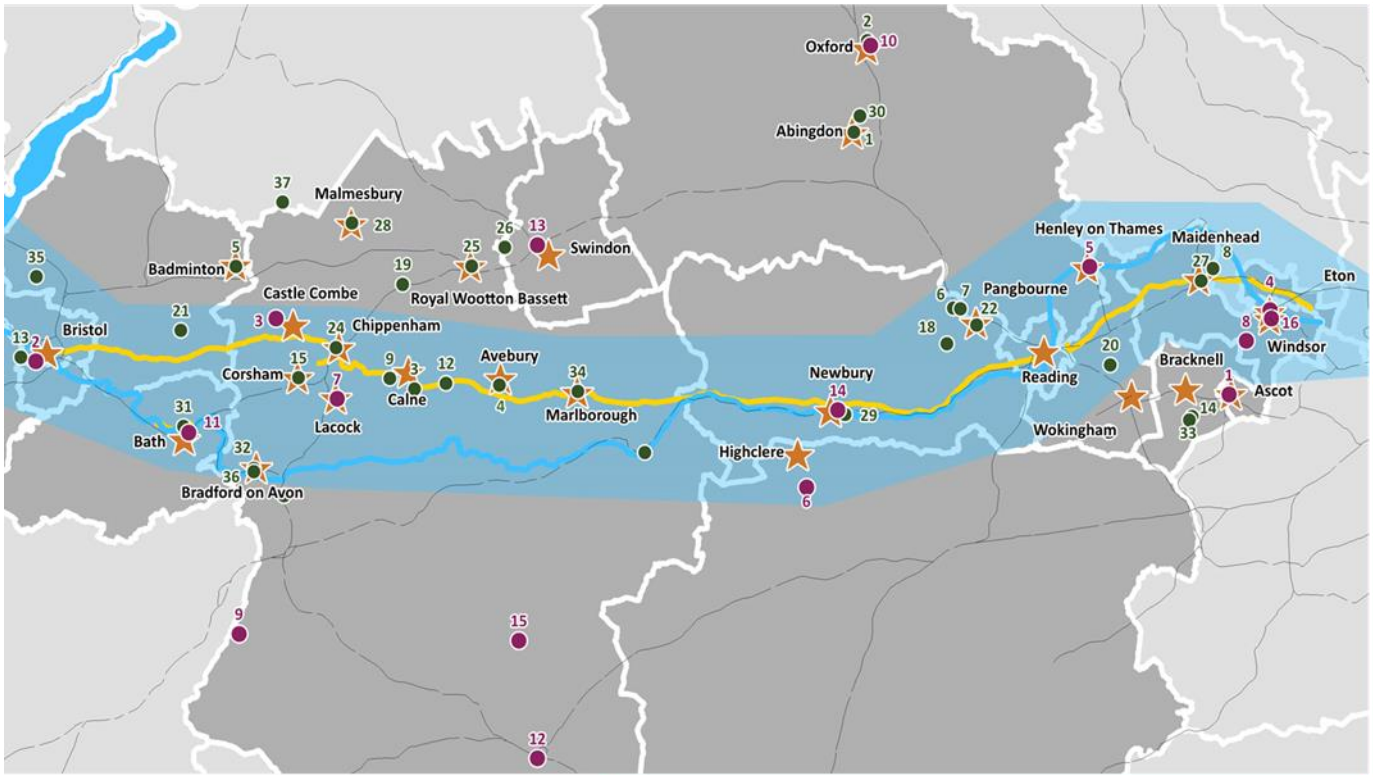
- transport organisations: Bristol Airport, GWR, Flybe, DFDS Seaways, Eurotunnel, National Express plus good interest from others.
- SMEs including attractions, accommodation, tour companies, guiding companies, retail, farm stay consortia, food and drink en-route
- major tourist attractions, including Stonehenge and McArthur Glen
- individual tour operators, specialist operators and travel companies, including House of Britain, Treasure Trails, Pedal England, Tripadvisor.

2.19 A number of partners have expressed interest in providing cash and in-kind match funding for the project if the route successfully secures investment:

- creating a new Great West Way pass with train and bus operators
- developing new bookable Great West Way programmes and itineraries with ferry and tour operators
- developing a new Great West Way package with local airports
- working with partners to develop the Great West Way London-Bristol cycle route.
- promote new Great West Way walking routes with support from partners

3. The Route (draft map to be replaced

3.1 The map below provides an initial draft illustration of the route for the purposes of the impact



Minor Attractions

1 Abbey Buildings, Meadows, Gardens
2 Ashmolean, Pitt Rivers museums
3 Atwell Wilson Motor Museum
4 Avebury Manor and Garden
5 Badminton Horse Trials 3-7 May 2017
6 Basildon Park (NT)
7 Beale Park
8 Boulter's Rock and Ray Mill Island
9 Bowood House
10 Bowood House
11 California Country Park
12 Cherhill White Horse and Monument
13 Clifton Suspension Bridge
14 Coral Reef Bracknell's Water World
15 Corsham Court
16 Corsham Village
17 Crofton Beam Engines
18 Cullingford Equestrian Centre
19 Dauntsey Lock
20 Dinton Pastures Country Park
21 Dyrham Park (NT)
22 Floating Point Float Centre
23 Fox Talbot Museum
24 John Coles Park
25 Jubilee Lake
26 Lydiard Park
27 Maidenhead Heritage Centre
28 Malmesbury Abbey
29 Newbury Racecourse
30 Radley Lakes
31 Royal Crescent
32 Saxon Church
33 The Look Out Discovery Centre
34 The Merchant's House
35 The Wild Place Project
36 Tithe Barn
37 Westonbirt Arboretum
38 Wootton Bassett Old Town Hall

Legend

Major Attractions
Minor Attractions
Towns
A4 Road
Kennet &Avon Canal
GWW Corridor
Major Train Lines

Major Attractions

1 Ascot Racecourse
2 Brunel's ss Great Britain
3 Castle Combe Circuit
4 Eton College
5 Henley Regatta end June
6 Highclere Castle
7 Lacock Abbey
8 Legoland
9 Longleat
10 Oxford colleges
11 Roman Baths
12 Salisbury Cathedral
13 Steam Museum of the GWR
14 Stone circle
15 Stonehenge
16 Windsor Castle

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4. Case Study Evidence

Why it matters

4.1 In order to inform the economic model, a case study review was undertaken to assess the types and scale of economic impact and wider benefits resulting from touring routes around the world. This was necessary to better understand the types of costs and economic benefits involved with a touring route of the scale of the Great West Way.

4.2 The case study review revealed how little economic impact assessment and evaluation evidence is available for touring routes. Whilst many routes point to the significant economic impact on their particular regions and impact areas, very few try to quantify or attribute this impact.

4.3 From an initial broad review, we have focussed on six case studies which provide some evidence on the costs involved and resulting benefits.

Findings from six case studies

Wild Atlantic Way, Ireland

4.4 The Wild Atlantic Way is Ireland's first long-distance touring route. The route draws many comparisons to the Great West Way with the development of bookable itineraries and an integrated website to attract tourists to explore the West Coast of Ireland. At almost 2,500 km long, the Wild Atlantic Way is much longer than the Great West Way and covers an extensive geographical area. There are approximately 200 towns and villages located along the route together with over 800 individual visitor attractions.

Funding and Spend

4.5 The Wild Atlantic Way project is led by and funded by Fáilte Ireland, the National Tourism Development Authority in Ireland.

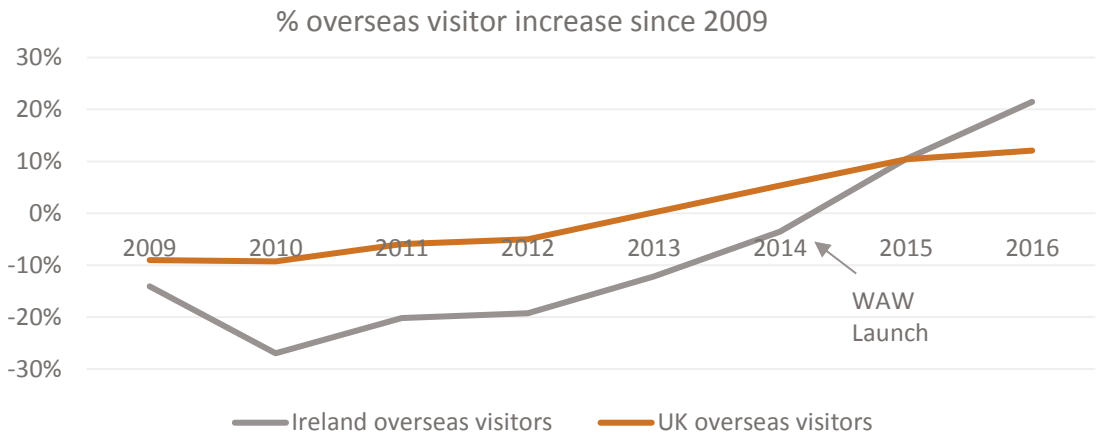
- A trial project of the Wild Atlantic Way in Connemara was funded to the tune of €1.8 million by the Government in 2012.
- A total of €10 million in funding in 2014 (€8 million by the Government + €2 million funding from Failte Ireland's Tourism Capital Investment Programme).
- The bulk of that investment went towards installing 3,850 signs along the 2,500km route (€3 million); building 159 Discovery Points and 25 embarkation points, including interpretation story panels (€4.6 million); and developing the Derringimlagh Signature Discovery Point Project at Clifden, Co Galway (€990k).
- A further €100k was spent on website development.
- **Ongoing Commitment:** Following the initial launch in 2014, the new Programme for Partnership Government set aside €100m in additional capital funding to take the Wild Atlantic Way to the next level.

Benefits

4.6 Given the Wild Atlantic Way is still in its infancy, there has not yet been an economic impact assessment of the route.

4.7 However, since its launch Ireland has experienced significant growth in overseas tourism, with tourism numbers increasing at a much faster rate compared to in the UK. Whilst not all of this growth can be attributable to the Wild Atlantic Way, it is thought that the new touring route has had a significant part to play.

Figure 4.1 Evidence of success



Source: CSO Overseas Travel, IPS

4.8 Fáilte Ireland forecasted growth in both domestic and overseas paid bed-nights from 2014 – 2020. They forecasted a 2.5% increase in domestic bed-nights for 2015, a 1.5% increase in 2016-17, followed by a steady 2% increase year-on-year. For overseas bed-nights, they have forecasted a 4% increase in the first year, followed by a 3.4% increase and a 3% year-on-year increase after year 4.

4.9 In reality, overseas bed-nights increased by 12% between 2014 and 2015 and overseas visitor spend increased by 19% (€660 million). If just one tenth of this increase in visitor spend could be directly attributable to the Wild Atlantic Way, this means the route has delivered a benefit to cost ratio of (€66:€10 = 7:1) in its first year alone.

Potential BCR of 7:1 in first year

4.10 In addition to the increase in visitor spend, 2016 also saw two large scale investments along the Wild Atlantic Way in County Galway come to fruition including the development of a new visitor experience in Connemara, and a new Cultural Centre, dedicated to Patrick Pearse.

There is huge potential for a touring route to act as a catalyst for wider investment.

South West Coast Path, England

4.11 Covering 1,014 km of coast from Minehead to Poole, the South West Coast Path National Trail leads walkers through a diverse landscape providing unique insights into the history, geology, culture and wildlife of the West Country.

Funding and Spend

4.12 In 2011 the Coast Path received funding to increase the economic value of the path by protecting and enhancing heritage features, improving the quality of the route and working with businesses to improve the facilities and information provided to visitors.

4.13 The total budget for the project was £2.83m, funded by the following organisations:

- £2.1m invested by RDPE
- £180,000 invested by parish town and county councils
- £88,000 invested by Natural England
- £189,000 invested by National Trust
- £153,000 in donations from local tourism business
- £88,000 via the SWCP Association from public donations
- £52,000 from charities, grants & trusts

4.14 The funding was spent on restoring cultural and historic sites along the route, improving the network of walking paths, installing interpretation panels and story boards, upgrading the design and functionality of the website and adding additional walking itineraries to the website. In addition, a portion of the funding was used to provide training to >1,000 people working in local businesses along the route. This training was designed to inform local businesses about the route and help them attract route users to spend in their businesses.

Benefits

4.15 The success of the work in encouraging greater use of the Coast Path is demonstrated by tourism visits to the South West Coast Path increasing from 7.8 million to 8.6 million per year between 2010 and 2012. Expenditure by these walkers grew almost 14% to £436 million, with the associated employment related to this spend growing from 8,733 to 9,771 full time equivalent jobs.

4.16 The marketing efforts resulted in a 77% growth in website traffic and a £2m editorial equivalent value of publicity was generated.

4.17 Over 70% of accommodation providers within one mile of the South West Coast Path consider it to be an important selling point for their business with accommodation providers on or close to LDRs attributing 36% of their turnover to the route.

4.18 The additional annual uplift in impact attributable to the improvements is demonstrated below:

- +824,350 day visitors
- +£54m in annual expenditure by SWCP users
- +£80m in business turnover
- +998 jobs

Potential BCR 13:1 per year

4.19 If 75% of the increase in visitor spend could be directly attributable to the route improvement works, the route has delivered a benefit to cost ratio of (£40:£3 = 13:1) per annum.

Great Western Greenway, Ireland

4.20 The Great Western Greenway in Ireland is a traffic-free cycling and walking facility that primarily follows the line of the old Great Western Railway. The first 18 km of the Greenway, from Newport to Mulranny, opened in 2010, while the two extensions formally opened in July 2011, lengthening the route to 42 km, mostly off-road.

Funding and Spend

4.21 Total capital investment in the project to date has come to nearly €5.6m, with about €1.6m spent on Phase 1, another €3.5m spent on Phases 2 and 3, and €0.5m spent on planning, design, engineering design and project management costs across all phases.

4.22 Sources of funding for this investment included:

- €5.1m in capital grant aid from the Department of Transport, Tourism and Sport, Fáilte Ireland the Department of Community, Rural and Gaeltacht Affairs;
- €0.5m investment from Mayo Co. Council to cover planning, design, engineering design and project management costs.

Benefits

4.23 Usage estimates prepared as part of the study suggest that the Great Western Greenway, on a full year basis, attracts nearly 23,000 persons from outside the local area. This includes:

- 14,800 domestic visitors
- 8,000 overseas visitors

4.24 Excluding local resident spend, estimates derived from the study suggest that visitors to the Greenway contribute to a projected €6.3m in spend in the local economy over a full year. This expenditure includes:

- over €3.5m in expenditure by domestic visitors
- nearly €2.8m in expenditure by overseas visitors

Case study findings point to higher BCR potential if funding is invested in the development of itineraries and marketing vs. in physical path design and infrastructure

North Coast 500, Scotland

4.25 The North Coast 500 was launched in March 2015 by the North Highland Initiative. It is a 500-mile-long touring route around the coastal edges of the Scottish Highlands. Consumers desire for 'authentic experiences', the growth of adventure based tourism and the increasing importance of sustainability are the key market trends behind the creation of the route.

Funding and Spend

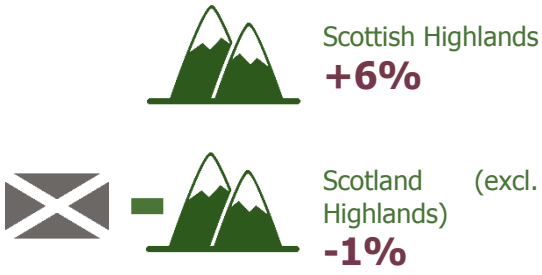
4.26 The North Highland Initiative have been supported by the Highlands and Islands Enterprise, the Scottish Government's Economic and Community Development Agency for the North and West of Scotland. Unfortunately, there is little publicly available information available on the cost and

funding streams for the route at present but we estimate between £2million and £5million has been spent on route development and marketing.

Benefits

4.27 The North Coast 500 has been in operation for less than 2 years, therefore the evidence on visitor numbers is more limited. National and regional tourism data for 2016 is not yet available for Scotland but between 2014 and 2015, tourism numbers in the Highlands increased by 6%, whereas elsewhere in Scotland (excl. Highlands) witnessed a 1% fall in visitor numbers. In addition, VisitScotland confirmed that visitor numbers at its information centres along the North Coast 500 route increased by 30 per cent in Ullapool, 27 per cent in Durness and 25 per cent in Thurso from April 1 to October 31 2016, compared to those from the same period last year. These two bodies of evidence suggest that the North Coast 500 is having a significantly positive effect on visitor numbers.

Figure 4.2 Change in Visitor Numbers 2014-15



Source: Visit Scotland Regional Tourism Data

4.28 The North Coast 500 have also launched a Business Club Membership for local businesses who want to benefit from the North Coast 500 brand and attract new customers. Membership costs between £150 - £960 per year (depending on the size of business) and benefits include permission to use the routes branding and a members' logo on the website. The route had attracted almost 100 members at the end of 2016 including six major corporate partners who help to fund the routes development. Specific attractions along the way have already witnessed benefits as a result of the route including Dunrobin castle which received 12,000 more visitors in 2016 above last years' figures. A local B&B along the route witnessed year-on-year booking numbers up by 15% and winter booking numbers up by 240%, providing some anecdotal evidence that the route is also encouraging out of seasonal visitors.

Case study evidence points to significant business benefits and potential for corporate support

Overmountain Victory National Historic Trail (OVT), USA

4.29 The Overmountain Victoria Trail route is 330 miles long, 87 miles of which are walkable trails (the remainder is a motor touring route). The trail crosses Virginia, Tennessee, North Carolina, and South Carolina

Benefits

4.30 A 1995 economic impact study of the route found that public visitation and use of the OVT had a significant economic impact in the counties through which the Trail passes. It was conservatively estimated that the trail-related direct spending by non-resident users was approximately $5.4m in 1995 and that total economic impact (total industrial output) was $7.5m. A total of 521 jobs were estimated to be supported in the Trail counties by the existence of the trail.

Route 66, USA

4.31 Running 6,100km from Chicago, Illinois to Santa Monica, California, Route 66 is one of the most iconic touring routes in the world. Established in 1926, it was one of the original highways within the U.S. Highway System and has developed into a major draw for both domestic and international tourists, attracting hundreds of thousands of tourers per year.

Benefits

4.32 Annual direct economic impacts from spending along the route include $38 million in heritage tourism spending, $67 million in Main Street spending on food, accommodation and leisure, and $27 million in museum spending—for a total of $132 million.

Case Study Summary

Table 4.1 Cast Study Summary

Route	Length (km) & Type of User	Costs & Type of Intervention	Benefits (annual)
Wild Atlantic Way 	**2,500km** Drivers	**€12m upfront capital** €2-3m annual revenue *Itinerary development, signage & marketing*	**BCR 7:1** +12% overseas bed-nights (2014 – 2015) +19% (€660 million) visitor expenditure
SW Coastal path 	**1,000km** Walkers	**€2.8m upfront capital** *Route improvement, itinerary development, industry training & marketing*	**BCR 13:1** +824,350 day visitors +£54m in visitor expenditure +£80m in business turnover +998 jobs
Great Western Greenway 	**42km** Walkers Cyclists	**€5.6m upfront capital** Physical path infrastructure & construction	**BCR 1.2:1** +14,800 domestic visitors +8,000 overseas visitors +€6.3m visitor expenditure
North Coast 500 	**830km** Drivers	Unknown £2-5m estimated *Itinerary development, & marketing*	+6% visitors in Highlands

OVT 	**530km** Drivers Walkers Cyclists	Unknown	+ $5.4m visitor expenditure (1995) +521 jobs
Route 66 	**6,100km** Drivers	Unknown	+$132m visitor expenditure

5. Core Economic Impact Assessment

5.1 The economic impact assessment section of this report is where all the projected economic benefits of the scheme are quantified, and where value for money judgements are made.

5.2 The main metric that is used in this Economic Masterplan for assessing value for money is the Benefit Cost Ratio (BCR). This is the ratio of the present value of all economic and social benefits to the present value of project costs over a set time horizon. The analysis period is 10 years from the start date of the scheme.

5.3 We have modelled different scenarios, and looked at what scale of uplift in visitor numbers is needed to achieve certain benefit:cost ratios (BCR), and therefore justify investment. We have looked at investment related to the Discover England Fund only, and so have not included the expected additional investment by other DMOs and partners, above the levels requested by the fund.

Summary Findings

5.4 The Great West Way has the potential to deliver significant economic benefits to the UK tourism industry and local businesses and communities along the route.

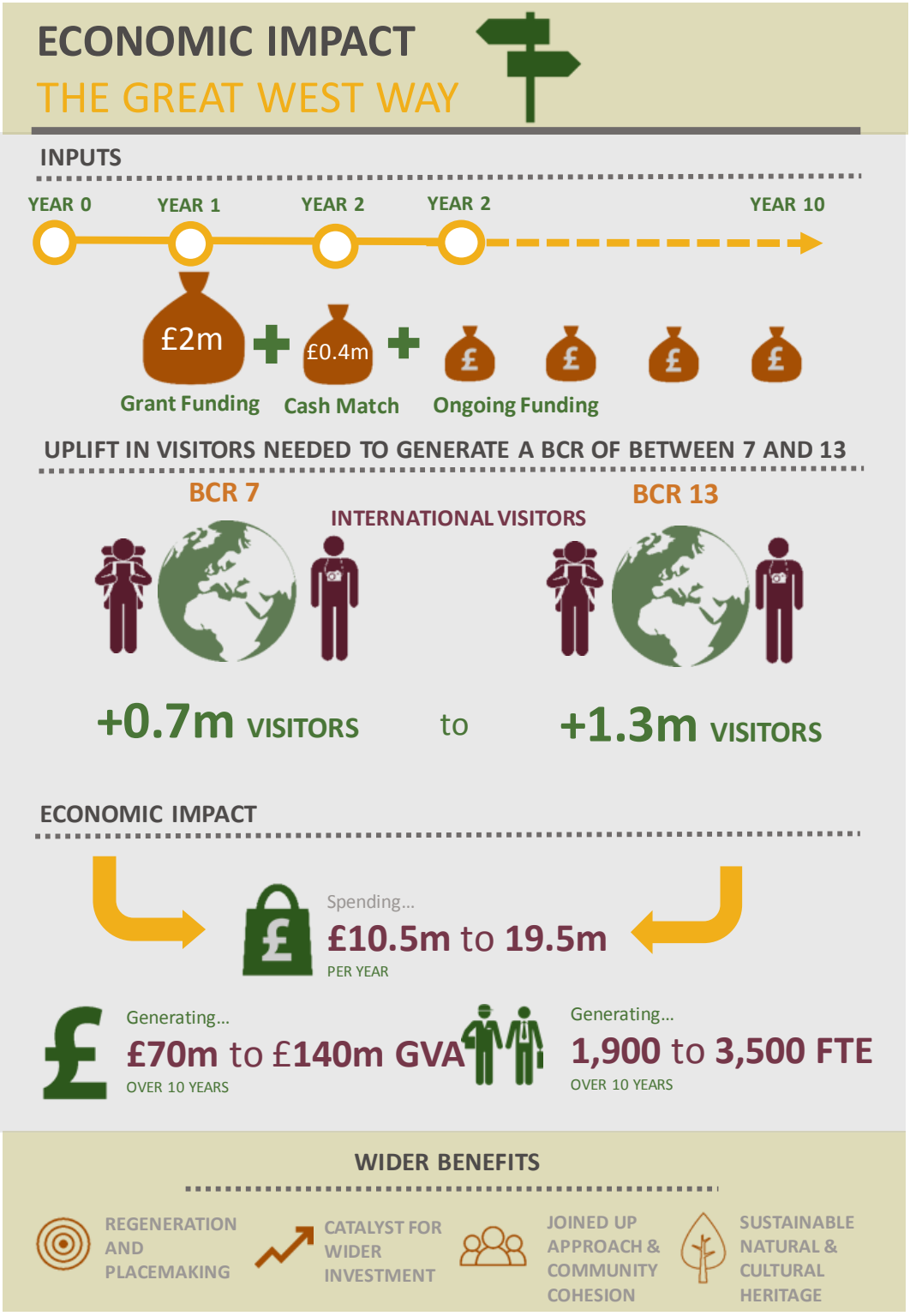
5.5 The route will offer tourists unique and inspiring experiences that will attract additional visitors into the country. It will act as a draw for visitors directly into regional England as well as tapping into the huge pool of potential visitors who are currently focussed on the London market. In 2015, over 9 million international leisure tourists didn't venture outside of London during their stay in England and only 24% of repeat leisure tourists ventured into regional England. Even if the Great West Way could attract just 2% of the London focussed market to explore the route, this would result in an additional 200,000 visits to the Great West Way. In addition, if the route could boost regional leisure tourism by just 5% this would result in an extra 200,000 visits per year.

5.6 The infographic below shows the potential economic impact of the Great West Way based on an initial £2.4m of upfront cash funding. These impacts are based on activity related to the Discover England Fund impacts only, and does not include other additional domestic activity or wider non-visitor impacts. The infographic illustrates that for the route to generate a benefit to cost ratio of 7 (in line with other similar routes) it will need to attract an additional 0.7m international visitors

over a 10-year period.[2] Based on the market potential of this route, we conclude that this is very achievable and in reality the benefits are likely to be much greater than this as the initial investment is leveraged to boost both the international, but also the domestic tourist market.

[2] It is important to note that these impacts are in addition to what would happen in the absence of funding and that whilst the route runs from London to Bristol, we have excluded London impacts in our analysis and have instead focussed on the impact areas to the West of Windsor.

Figure 5.1 Summary Impacts Assuming £2m Funding



Source: Regeneris

Economic Baseline

Core Impact Area

5.7 The Great West Way stretches between London and Bristol and passes through many different local authorities. As the map in section 3 shows, the indicative GWW corridor route passes through a subsection of these local authorities. In order to come up with visitor information for these areas, we have made assumptions about the proportion of visitors in these Local Authorities to include in our assessment[3]. This has been based on which visitor attractions lie within the GWW corridor eg if the major visitor attractions lie within the corridor then a high proportion of total visitors in that area have been included in this tighter impact area.

5.8 Based on this, the data shows that in this tighter impact area:

- There were approximately 31.5m leisure visitors, spending around £1.8bn.
- The majority of these visitors are domestic visitors (around 24.5m), with around 7m international visitors.

Wider Impact Area

5.9 The proposed route passes through the local authorities outlined in Figure 5.2 below. According to the latest data available from economic impact reports for each local authority, around 71.7 million visitors to these local authorities in the last year. Wiltshire (home to Stonehenge) accounts for the largest proportion of these visitors (just under 30%).

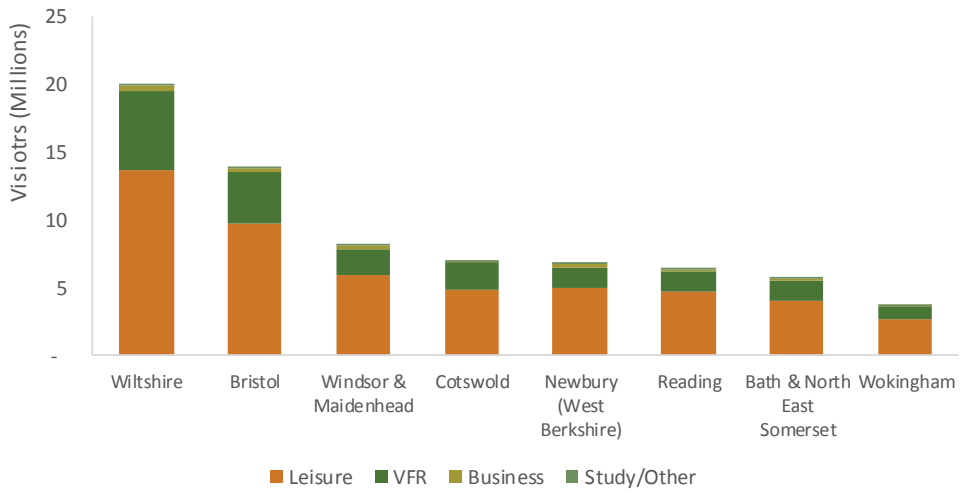
5.10 It is also clear that the main reason for visits are leisure/holidays, followed by visits to friends and relatives.

- There were approximately 51m million leisure visitors to the wider impact area, spending around £3.0bn

5.11 It is important to make this distinction given the different spend patterns associated with these groups. The Great West Way is initially targeted towards leisure users, as there are longer term opportunities to attract business tourism visitors.

[3] It is important to note that whilst the route runs from London to Bristol, we have excluded London impacts in our analysis and have instead focussed on the impact areas to the West of Windsor.

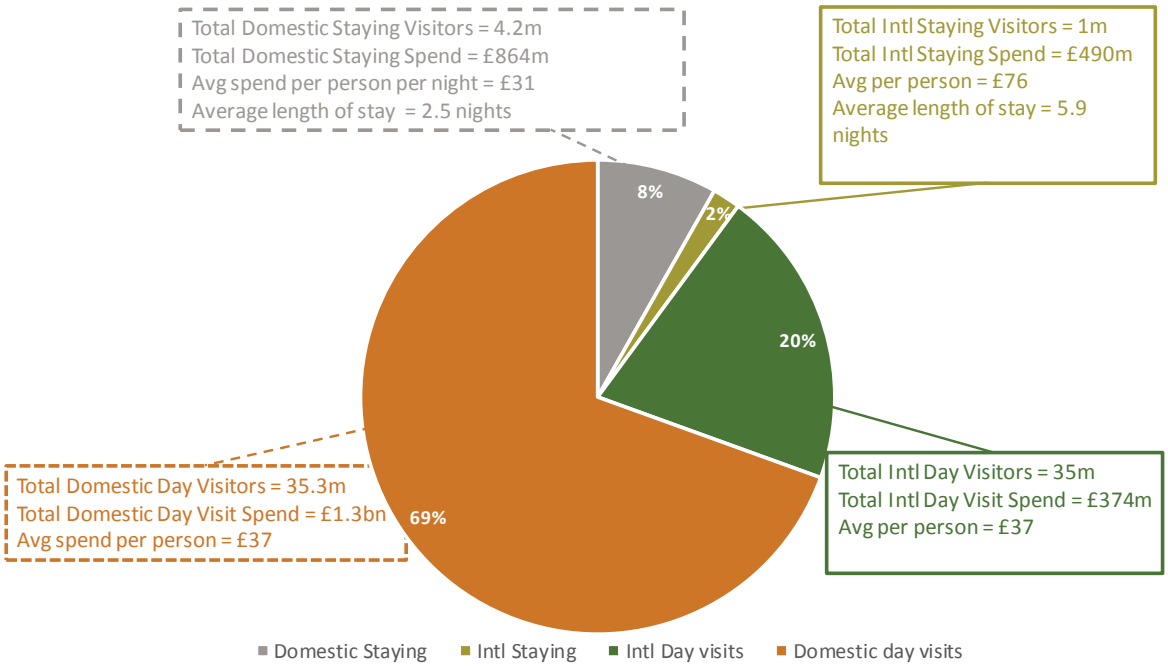
Figure 5.2 Total Visits by Local Authority



Source: Economic Impact Reports for each area. Data is for 2015.

5.12 Although domestic visitors currently make up both the majority of visitors and the majority of spend (77% and 71% respectively), the Discover England Fund is primarily targeted at international visitors. The baseline data shows that international visitors spend on average more than domestic visitors and in more sectors of the economy (such as accommodation). They also stay longer than domestic visitors ie an average of 5.9 nights across these local authorities compared to around 2.5 nights for domestic visitors.

Figure 5.3 Breakdown of Leisure Visitors, 2015

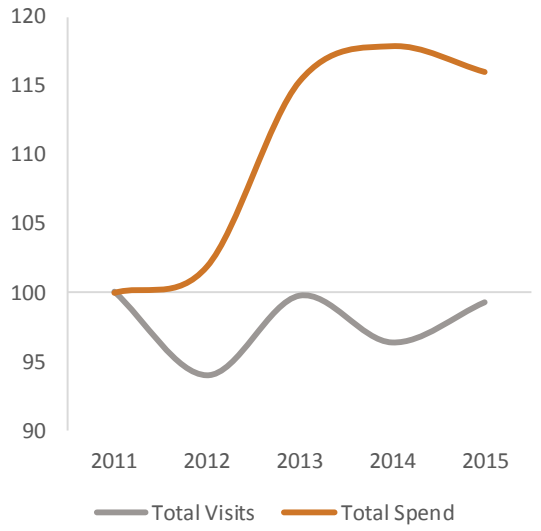


Source: Economic Impact Reports for each area. Data is for 2015 except for Wiltshire where the latest year available is 2014.

5.13 Time series data for these areas shows that spend has increased at a greater pace compared to the increase in visitors.

- Across the local authorities in the GWW, domestic visits have actually fallen slightly since 2011, whereas spend has increased by just under 20%, again indicating the average spend of visitors has increased.
- However, for international visitors there has been an increase in both the number of visits and spend by around 7-8%.

Figure 5.4 Index of Visits and Spend, 2011-15



Source: GBTS, IPS

Methodology

Defining the Route

5.14 To assess economic impact and reflecting the flexible nature of how the Great West Way route could be defined, we have assessed the route in two ways:

- **Wider Impact Area:** all the local authorities outlined above.
- **Tighter Impact Area:** a sub-section of the local authorities, taking into account only a proportion of these local authorities. It is important to note that whilst the route runs from London to Bristol, we have excluded London impacts in our analysis and have instead focussed on the impact areas to the West of Windsor. An illustrative example of the tighter impact area is provided in the map in section 3. This tighter area is what the economic modelling is based upon. However, a recommendation for future work would be to carry out a more focussed analysis on this tighter area, using Cambridge model data for the defined corridor.

Economic Modelling

5.15 The conventional approach to modelling the economic impact of interventions such as this is to make assumptions (based on experience, research and case studies) on the potential uplift in visitor numbers and therefore expenditure as a result of the scheme. However, given the multi-modal and unique nature of the Great West Way as well as the lack of evidence from directly similar case studies, we have taken a different approach which is outlined in the following section. As part of this process we consulted with the Visit England research team on our proposed methodology.

Scenario Modelling

5.16 We have modelled different scenarios, and looked at what scale of uplift in visitor numbers is needed to achieve certain benefit:cost ratios (BCR), and therefore justify investment. This approach then allows us to look at the uplift in visitors required, and based on past trends and other interventions, make a judgement on whether the required uplift is realistic.[4]

What scale of impact and uplift is needed to justify investment?

5.17 In addition to a 'do nothing' scenario, we have modelled three scenarios: a low, mid and high scenario. Each scenario is based on a different set of cost inputs corresponding to the scale of the proposed scheme. For each of these scenarios, we have looked at what level of uplift in visitor numbers is needed to achieve a BCR of 3, 7, and 13. These BCRs have been used based on the analysis of the case studies (see Section 4) indicative of the types of BCR the project could be reasonably expected to produce, depending on its scale.

A BCR of between 7 and 13 is justified based on the economic impact of similar long distance touring routes in the UK.

Model Inputs & Assumptions

5.18 The table below summarises the inputs used for the model.

Table 5.1 Model Inputs

Input	Description
Visitor Numbers	• We have taken visitor numbers from the economic impact reports for each local authority. We have then used these reports, as well as information from the Great British Day Visitor Survey to calculate the proportion of visitors that are leisure visitors. • We have then calculated (i) how many of these leisure visitors are domestic and international visitors (ii) how many are day and staying visitors.
Average Spend	• The economic impact reports for the local authorities provides overall spend data. We have used this to calculate average spend figures for the different types of visitors.
Average Length of Stay	• We have calculated this using historical visitor figures and information on the total number of nights stayed, for both domestic and international visitors.
Categories of Spend	• Data from the GB Tourist Survey and the GB Day Visitor Survey has been used to allocate spending to sectors. This expenditure is then fed into Regeneris' regional input-output tables to produce estimated jobs and GVA figures.

[4] This approach was confirmed with VisitBritain prior to our assessment.

Deadweight

5.19 These are the benefits that would occur anyway without the Great West Way and so cannot be attributable to the proposed intervention. We have modelled what uplift in visitor numbers would occur in the absence of the Great West Way using historical data on the average annual uplift in visitors.

Funding Options

5.20 We have considered four potential funding options for the economic impact assessment, outlined below. Although there is potential for further cash match funding (ie from DMOs), this additional funding is not committed and therefore we have not included it in our economic assessment. These options are discussed in more detail within the 'Project Funding and Spend' section of the report, where additional DMO funding is outlined.

Option	DE Funding	Cash Match Funding	Ongoing Revenue Funding (Year 2+)
Option 1	£0.0m	£0.06m	£0.00m
Option 2	£1.0m	£0.20m	£0.22m
Option 3	£1.5m	£0.30m	£0.34m
Option 4	£2.0m	£0.40m	£0.46m

Composition of New Visitors

5.21 We have had to make assumptions regarding what type of visitor will account for the uplift in visitor numbers. We have assumed a composition of mainly international visitors, given that this is the main target of the Discover England Fund. It is unrealistic to assume that domestic tourist numbers will not also increase as a result of the route development. The table below describes the composition of new visitors for the purposes of this assessment.

Visitor Type	% of new visitors	Justification
Domestic Day Visitors	5%	A small percentage of additional tourists have been assumed to be made up from domestic day visitors. As the branding will focus on slow tourism and exploration, we have assumed that only a small proportion will be domestic day visitors.
Domestic Overnight Visitors	15%	We have assumed that some of the additional tourists will be made up from domestic overnight visitors. If the route is being marketed to international tourists as an attractive holiday destination, it would be realistic to assume domestic tourists looking for an exciting 'staycation' destination would also be attracted to the route.
International Day Visitors	20%	Some of the additional tourists have been assumed to be made up from international day visitors. If there is direct consumer marketing within international markets, it would be realistic to assume that international tourists staying in London, may be more attracted to spending a day discovering destinations and attractions along the route.
International Overnight Visitors	60%	The majority of additional tourists are assumed to be international overnight visitors. The route will be directly marketed to international travel trade and consumers. It will

	promote slow tourism and discovery, lending itself to attracting significant numbers of additional overnight international visitors.

Findings

Estimated Benefits

5.22 Table 5.2 shows the number of visitors that would be needed to achieve the three stated BCRs (taking into account the increase in visitors that would occur anyway). Note that this is based on activity related to DEF impacts only, and does not include other additional domestic activity or wider non-visitor benefits. To achieve a BCR of 7 for example, assuming £2m of DE funding plus the minimum cash match, international visitors will need to increase by around 20% over 10 years relative to the current level of international visitors.

5.23 The figures shown below are for a 10 year period. The equivalent annual figures are:

- BCR of 3 = 32,600 additional visitors pa, of which 29,000 would be international visitors.
- BCR of 7 = 76,000 additional visitors pa, of which 68,000 would be international visitors.
- BCR of 13 = 141,000 additional visitors pa, of which 126,000 would be international visitors.

5.24 Figure 5.5 below shows that if the GWW were successful in capturing a small share of visitors to nearby areas (such as London and Bristol), the investment would generate a good BCR.

Table 5.2 Economic Benefits, assuming £2m DEF - Visitor Uplift Needed (10 year period)

BCR	Additional Visitor Spend Needed	Additional Visitors Needed (% increase above base case)	
		International	Domestic
3	£45.2m	0.3m (4.1%)	0.03m (0.1%)
7	£105m	0.7m (10%)	0.08m (0.3%)
13	£196m	1.3m (18%)	0.15m (0.6%)

Source: Regeneris Consulting Calculations. Notes: (i) % increase in additional visitors needed refers to increase in the tighter impact area (ii) Spend figures stated are discounted at 3.5% over 10 years

5.25 The expenditure of these additional visitors could support over 1,000 direct jobs over 10 years (equivalent to over 100 jobs per annum). Adding in the wider multiplier effects from this uplift in visitor numbers would push the increase to well over 2,000 jobs across the Great West Way.

Table 5.3 Economic Benefits, assuming £2m DEF - 10 year period

BCR	Jobs (FTEs)		GVA (£m)	
	Direct	Total	Direct	Total
3	530	800	£20.7m	£31.5m
7	1,220	1,850	£48.4m	£73.5m
13	2,270	3,450	£89.8m	£137m

Source: Regeneris Consulting Calculations. Note: Benefits are for the tighter impact area

Model Limitations

5.26 The limitations of the modelling and approach should be borne in mind when interpreting the results. These are explained in detail in the economic model we have produced. The key limitations are briefly outlined below.

- Inputs are based on economic modelling: the information we have used for our modelling (ie visitor information and spend figures) are all based on existing economic models, as opposed to observed data such as surveys. We have attempted to use the same inputs for consistency (plugging gaps only where needed).
- Defining the route: given the nature of the Great West Way and the availability of information it has been difficult to gather information solely for the Great West Way. As outlined in our methodology, we have had to make assumptions on what proportion of visitors in an area we have included in our modelling.
- Unavailability of data: for some local authorities, we have been unable to source data on visitor numbers and spend for the different types of visitors. In these cases, we have used assumptions and proportions from adjacent local authorities.

Scenario Modelling

5.27 We have tested different scenarios to look at the uplift in visitor numbers and associated economic impact based on different levels of investment, different BCRs and the length of stay of visitors.

Cost Options

5.28 We have shown above that the high investment option is achievable and has the potential to deliver significant economic benefits. In the case of a lower level of investment, these other options still stand to support a substantial number of jobs and GVA.

Table 5.4 Economic Benefits, Options 2 & 3 (10 year period)

BCR	Additional Visitors Needed (% increase above base case)		Direct Jobs (FTEs)	Direct GVA (£m)
	International	Domestic		
Option 2 (£1m DE Funding)				
3	0.24m (3.4%)	0.03m (0.1%)	430	£17.1m
7	0.56m (8.0%)	0.07m (0.3%)	1,010	£40.0m
13	1.04m (15%)	0.12m (0.5%)	1,880	£74.3m
Option 3 (£1.5m DE Funding)				
3	0.26m (3.8%)	0.03m (0.1%)	480	£18.9m
7	0.62m (8.8%)	0.07m (0.3%)	1,120	£44.2m
13	1.15m (16%)	0.14m (0.6%)	2,080	£82.1m

Source: Regeneris Consulting Calculations

Duration of Stay

5.29 Given that it is multi-modal and embraces the idea of slow tourism, one of the objectives of the Great West Way is to increase the dwell time of visitors. We have looked at what uplift in visitors would be required if the dwell time of visitors increased by around 20%.

- For international visitors, the average length of stay would increase from just under 6 days to around 7 days.
- For domestic visitors, the length of stay would increase from 2.5 to 3 days.

5.30 An increase in the dwell time of visitors means that the average spend per visitor would be higher, as they spend more on accommodation and food and drink during their extended stay. This means that fewer additional visitors would be needed to secure the expenditure required to justify the investment.

5.31 For example, an increase in the dwell time of visitors means that to achieve a BCR of 7, a 9% increase in international visitors is required as opposed to a 10% increase.

5.32 Even under the standard dwell time, the required increase in the number of visitors looks achievable. Given that the GWW is forecast to increase dwell time, a lower number of extra visitor numbers may be required to achieve the target BCRs.

Table 5.5 Economic Benefits, Options 4 High Dwell (10 year period)

BCR	Additional Visitor Spend Needed	Additional Visitors Needed (% increase above base case)	
		International	Domestic
3	£45.2m	0.28m (4.0%)	0.03m (0.1%)
7	£105m	0.65m (9%)	0.07m (0.3%)
13	£196m	1.2m (17%)	0.14m (0.6%)

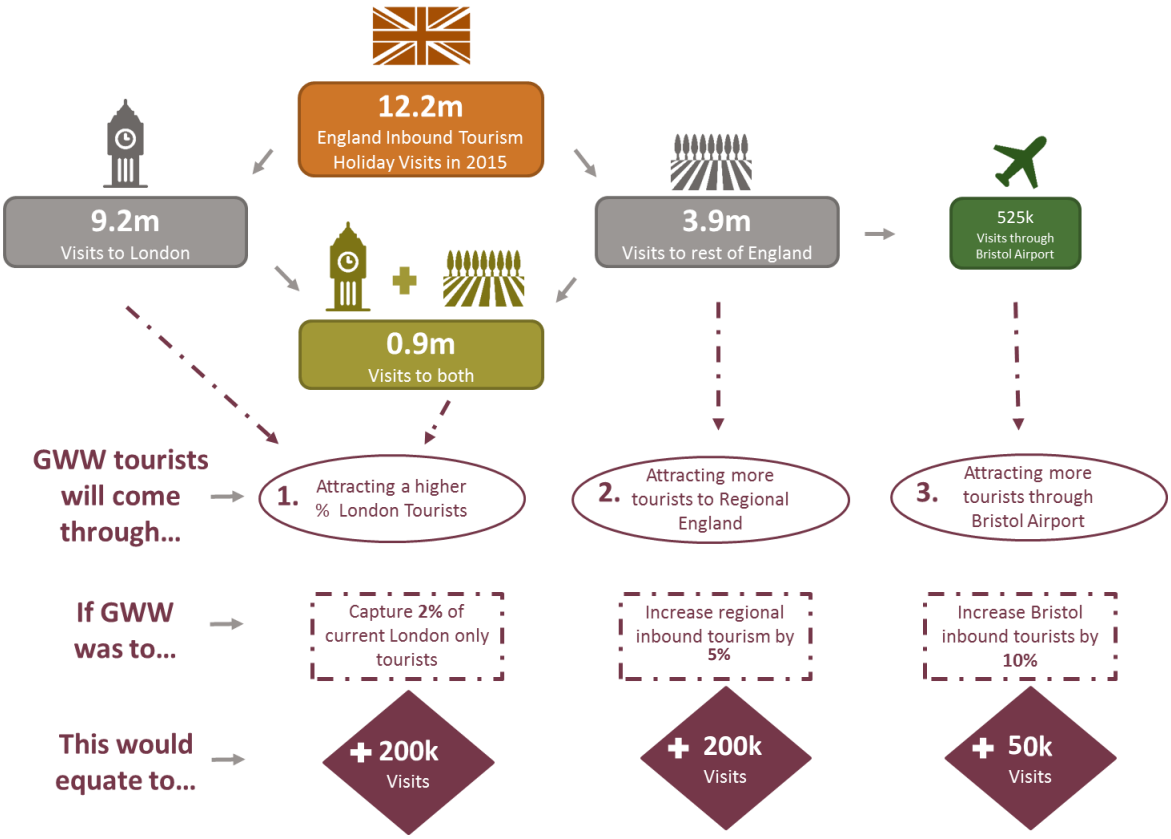
Source: Regeneris Consulting Calculations

New and Existing Market Capture

5.33 The above analysis shows us how many additional visitors the Great West Way could attract and the economic impact of these additional visitors, assuming similar benefit to cost ratios to other touring routes around the world could be achieved. We now explore where these additional visitors might come from and whether the route is likely draw visitors out of London.

5.34 Using the International Passenger Survey data for 2015, we can calculate the number of tourists visiting England for holiday purposes, and gain a greater insight into where these tourists are visiting once they arrive in England. The diagram below shows the significant potential for The Great West Way to capture leisure tourists visiting the UK from overseas.

Figure 5.5 Where will the increase in visitors come from? (per annum)



Source: IPS 2015, Regeneris Consulting

5.35 The route will act as a draw for visitors directly into regional England as well as tapping into the huge pool of potential visitors who are currently focussed on the London market. In 2015, over 9 million international leisure tourists didn't venture outside of London during their stay in England and only 24% of repeat leisure tourists ventured into regional England. If the Great West Way could capture just 2% of the current market of overseas visits to London, that would result in an additional 200,000 visits to the Great West Way. If the route could boost regional holiday tourism by just 5% this would result in an additional 200,000 visits, before considering the significant impact the route will also have on the domestic market.

5.36 From consultation with Bristol Airport, it is assumed that approximately 675,000 overseas visitors fly into Bristol airport every year. Assuming 78% of these passengers are holiday passengers, in line with the findings from the Civil Aviation Authority 2015 survey, this equals 525,000 international holiday passengers travelling through Bristol airport each year. If the Great West Way could increase the number of tourists travelling through Bristol Airport by just 10%, this would result in an additional 50,000 visits to the Great West Way. These examples illustrate potential areas of market capture for the Great West Way.

5.37 The above analysis demonstrates the potential of the route to attract large numbers of international tourists into the impact area. However, as the project is developed, there will be the potential to generate more substantial benefits for the local communities and businesses along the route through the domestic tourism market. These are discussed in the subsection below.

Significant benefits for the domestic market

5.38 Whilst the Discover England fund is primarily focussed on the international market (and as a result the funding will be spent targeting this market) in reality, it is expected that the Great West Way will also deliver significant economic benefits through the domestic tourism market.

5.39 In conjunction with the Discover England funding, it is expected that as the route develops it will attract additional funding from local partners. This additional funding has not been modelled in the core economic impact analysis above but with several partners already verbally committing to funding, it is expected these initiatives will generate significant benefits through the domestic market with the initial discover England initiatives acting as a catalyst for this.

5.40 There are currently 24.5 million visits made by domestic leisure tourists to the tighter impact area around the Great West Way per year. Despite only 10% of these visitors spending at least one night in the area, the total spend impacts are still significant with visitors spending approximately £1.3bn last year. With the average domestic tourist spending £54 in the impact area, the domestic market has the potential to generate significant economic benefits if these numbers are bolstered.

5.41 Evidence from other similar touring routes around the UK point to significant economic benefits resulting from the routes attraction to the domestic market. For example, the North Coast 500 polled a sample of those completing the route in 2016 and recorded 85% of these were domestic tourists. The route is particularly popular with cyclists with cycling trips by domestic visitors bringing in £78 million to Scotland's national economy in 2015. Similarly, the South West Coastal Path found that 91% of their visitors were domestic users with 16% living within the South West but 75% travelling to the path from other UK regions. To put this example into context, the £2.83 million of funding invested into improving the South West Coast Path through enhancing heritage features, improving the quality of the route and working with businesses to improve facilities, resulted in an uplift of 800,000 visitors per year, with approximately 700,000 of these visitors from the UK.

5.42 These results highlight the potential of the Great West Way to leverage the positive impacts of the initial investment to boost the domestic tourism market and draw in visitors from other UK regions.

6. Wider Economic Impacts

6.1 There are inevitable limitations to a purely quantitative economic impact assessment of a tourism strategy. Conventional and generally accepted tourism impact assessment is predicated on the identification and estimation of tourist expenditure and how that expenditure multiplies through the supply chains and wage bills of tourist-facing businesses. But effective tourism strategy can affect more than just tourist visits and expenditure. These parallel effects are difficult to capture and quantify but should still be considered when setting strategy and policy.

6.2 These secondary impacts can be summarised as follows:

- **Advancing other economic agendas**
- **Signalling effects**
- **Influence on the incentives faced by other investors**
- **Leveraging other public and private sector investment** (this is discussed further in the project funding and spend section of the report)

6.3 These impacts are difficult to quantify because there is no clear and unambiguous cause-and-effect relationship between a tourism investment and the resulting impact. For this reason, tourism-related assessments have traditionally focussed almost exclusively on visitor expenditure. Expenditure is relatively easy to isolate and attribute to specific consumers (ie tourists) and reliable inferences can be made about indirect and induced expenditure that cascade from that estimate.

> A tourism strategy's effect on a destination's 'sense of place' is an amorphous concept, as is its influence on the perceptions and decisions of inward investors.

6.4 To ensure that these impacts are not ignored or taken for granted by the Great West Way, however, we provide below a series of anecdotal case studies, if only to stress the importance of these factors, which can and should inform the ultimate strategy.

Inward Investment Impact

6.5 A tourism brand or strategy affects more than just the purchasing decisions of individual tourists. It can have a material effect on the way that a destination is perceived by the market, irrespective of whether people choose to visit for leisure purposes.

6.6 When any corporate location decision is made a range of factors is considered. Investors evaluate locations against a set of key criteria, the most important of which are typically transport and telecoms infrastructure, suitable and affordable property, proximity to markets, and the availability of appropriately skilled staff. At 'long list' stage these basic factors that directly affect bottom-line profitability are typically the main consideration.

> Perceptions are central to the location decisions made by prospective or potential inward investors.

6.7 There may be several places that meet these criteria though, at which point other factors come into play: quality of life, diversity of leisure/cultural activities, client/customer perceptions, etc.

6.8 Much of the tourism infrastructure also doubles as the arts, cultural and leisure amenity that helps towns, cities and regions to attract the skilled labour that is central to their economic strategies.

> In place marketing terms, it is the tourism infrastructure, product and brand that can make the difference between an inward investment deal that closes and one that doesn't.

6.9 This connection between tourism marketing and the wider economic development agenda is evidenced by the websites, brochures and marketing collateral of the LEPs and inward investment agencies, most of which, are decorated with imagery and language that speaks to the quality of life of the place. Indeed, the sub-head to the "Inward Investment" section of the West of England Economic Plan is "getting on the shortlist" and the substance of the strategy is summarised in the following statement:

"A city region with a strong image and sense of identity is critical to attracting talent, inward investment and visitors. … The most significant investment we can make for the region is to grow the Invest in Bristol and Bath service and our two destination organisations."

6.10 There is thus a natural overlap between the image that a destination projects to attract tourists and the place brand it creates to resonate with investors. In the case of the Great West Way, there is the potential for the route to positively influence LEP agendas and contribute to wider economic growth strategies.

6.11 Below are just some of the images that are taken from the inward investment brochures and websites for LEP areas that touch the Great West Way corridor.

Figure 6.1 Imagery from LEP and IIA websites in GWW corridor

Source: LEP and IIA websites

'Signalling' effects

6.12 Because of the way that they shape people's perceptions of a place these broad ranging destination brands and the tourism-related projects that cascade from them can play an important part in sending *deliberate* signals to key markets.

6.13 We regularly see this in a context where – for investment, regeneration or economic development purposes – councils or agencies need to shift people's perceptions of a place. This might be because an area is undergoing rapid regeneration, while market perceptions are still shaped by the legacy of an industrial past. The LEP or local council may be keen for investors and potential residents to buy into a vision of the future and not a memory of the past. They want to communicate key attributes of a place, such as its natural environment, skilled workforce, high quality of life, strong communications and transport links, or the presence of some important industrial cluster. Tourist marketing can also double as promotion for activities that sell the 'quality of life' virtues and brand values of a destination to a mass market, irrespective of the fact that only a narrow market segment may directly participate in those activities. There are multiple examples that help to illustrate and understand this.

6.14 The **Lowry Centre** in Salford served an arts and cultural agenda, but its driving rationale was to 'announce' the transformation of the redundant Manchester Docks, into the mixed-use community of Salford Quays. It was deliberately timed and sited to inspire confidence among wary private investors about the Council's commitment to the delivery of infrastructure and public services. And it helped to position Salford as the forward-looking 'can do' Council that could deliver large and complex capital projects in the face of negative perceptions. There is no conventional economic impact assessment that can draw a line of causality between visits to the Lowry Centre and the development of MediaCity:UK, the largest concentration of media businesses outside of

London. Equally, it is no exaggeration to say that without the Lowry Centre, MediaCity:UK would not have happened.

6.15 **Ashford Borough Council** has lighted on an economic development strategy that capitalises on its high speed connectivity to London and the fact that the Borough extends into the pristine, 'Garden of England' countryside of rural Kent. It aims to attract a highly skilled workforce of commuters and higher value businesses that require that skills base. Yet perceptions of the place have been shaped by the extraordinarily high profile of only three assets: The International Eurostar Station, the MacArthurGlen Outlet Mall, and a quaint town centre that connects them. The Borough is best known nationally and internationally for features that are *least* reflective of the Borough as a whole. It has therefore focussed on a 'low volume, high value' tourism strategy targeted at niche markets: wine enthusiasts, amateur astronomers, high end glamping. In doing so, the Borough has made the conscious decision to break with tradition and measure the value of tourism, not just in terms of volume and value of tourist spend, but also – indeed, primarily – in terms of the influence that tourism marketing can have on the way the place is perceived by residents and businesses.

6.16 The **Angel of the North,** in Gateshead, was part of a deliberate long term strategy of reorienting the local economy away from heavy industries in decline (shipbuilding, coal mining) and toward more contemporary creative, cultural and knowledge industries. The Angel also marked a transition from an experimental period with low risk projects of mostly local relevance (school arts programmes, 'art in the high street'), to a period of large scale, high profile cultural regeneration projects of national significance (The Millennium Bridge, The Baltic, The Sage). Considered in context, the Angel served a particularly important economic purpose that goes far beyond its role as a sculptural icon or a tourist attraction. A true measure of the Angel's success cannot be limited to a calculation of footfall and spend. The whole arts and cultural strategy in Gateshead – for which The Angel was only a symbol – cascaded from a wider social and economic strategy that was all about pivoting the economy in an entirely new direction.

6.17 Different destinations in Wales, Scotland and England have – with varying degrees of success – tried to position themselves as 'extreme' or **'adrenaline' sports destinations**. Why? It is the nature of these activities that the target market of actual *participants* is relatively small and niche. It remains a compelling strategy nonetheless. Implicit in the suggestion that the best UK mountain biking is in Fort William or in Lanarkshire, or that the best places for surfing and rock climbing are, respectively, in Pembrokeshire or the Cairngorms, is an understated but powerful message: that these must be attractive places with unspoiled environments.

6.18 In virtually none of these instances would a formal Economic Impact Assessment – narrowly focussed on tourist visits and expenditure – provide a true reflection of the project's or the campaign's contribution to the local economy. This is better captured in the table, overleaf.

A key takeaway of these case studies, as it applies to the Great West Way, is the power of tourism and place marketing to communicate deliberate signals to specific markets for defined reasons – irrespective of whether those markets ever visit the destination as a tourist.

6.19 The critical lesson, however, is the potential for a tourism strategy to add value beyond what is measurable in terms of visits and spend, *subject to* that strategy taking account of local economic agendas and knowing precisely what signals need to be transmitted to which markets. This is precisely the approach that we understand is central to The Great West Way, which is taking deliberate steps to involve and engage with the representative LEPs – both formally and informally – as well as the DMOs.

6.20 The Great West Way affords excellent opportunities to achieve this through both promotional campaigns and through targeted product development. If the automotive 'cluster' is an Oxfordshire LEP priority, and its automotive brands are already developing tourism-oriented 'drive experiences' then it is a small step to conceive of a drive experience product that reinforces the Great West Way, Oxfordshire, and the private automotive brands. That VR/AR has become the focus of so much attention and investment within the attractions industry, then the fact that the Great West Way is anchored by country's most important cluster of VR/AR start-ups has to be seen as a major opportunity. Key to identifying and exploiting these opportunities, however, is to recognise the value of promoting these products and businesses for their own sake and not just as a means to attract more tourists and spend.

Table 6.1 Signalling Effects of Tourism Projects and Campaigns

The place	Perception	Project / Campaign	'Signals' to the market	Effect
Salford Quays	Industrial, unattractive, unsafe, far away, contaminated	The Lowry Centre. A cultural landmark and visitor destination, deliberately and strategically located on the waterfront, at the furthest point of the first regeneration site.	• Council's commitment to delivering the 'vision' described in its 20-year regeneration plan. • Assurance that infrastructure and services would be delivered as promised. • Design quality benchmark.	Competence and credibility of the destination established. Subsequent private sector investment in the Quays for new residential, employment, leisure and retail space. Selected as site for BBC's Northern HQ, which led to the creation of MediaCity:UK.
Ashford, Kent	'Odd' and 'unnecessary' stop on Eurostar route from London to Paris. England's first retail outlet mall. Small and run-down town centre.	Application for Dark Sky Community designation through the International Dark Sky Association, anchored by a small observatory for amateur stargazers.	• Ashford is not what you think it is. • Nucleus of town centre is surrounded by a necklace of picturesque 'Garden of England' villages in rural Kent. • Great place to live for high skilled, knowledge industry workers who need quick connection to Central London.	Partnership struck with local Amateur Astronomy societies, as well as parish councils and regional HE/FE institutions. Actions underway to revise lighting policy and standards to align with 'Dark Sky' requirements. Site acquisition and feasibility study for observatory and glamping site underway.
Canary Wharf	Far away. Hard to reach. 'Empty in the evenings and dead at the weekends'.	*Arts & Events Canary Wharf*, a wholly owned subsidiary of Canary Wharf Group, dedicated to curating the art programme and aggressively animating the public spaces within the estate.	• Easier to get to than you think. • 'There is always something going on there…'	Existing commercial and retail space is almost fully let, at near City rents. New commercial space under construction. New residential district consented and underway.
Gateshead	Post-industrial decline. High and structural unemployment. Skill base that is not suited to new industries.	School arts programme, 'Art in the High Street' Angel of the North	• Gateshead is changing and open to change • A focus for creativity and cultural industry	Angel of the North featured on cover of Time magazine's 2001 issue on 'the world's most creative cities'.

New Incentive Structures

6.21 In a more practical and tangible sense, an adopted tourism and place branding strategy that is seen to be effective and credible will affect the incentive structure faced by other public and private sector developers and investors. This is a consequence of both the planning and funding environments in which projects are delivered.

6.22 The more that developers can demonstrate that they are conscious of and sensitive to the strategic objectives of the place, the better chance they have to secure planning and raise finance. So the whole cascade of adopted strategies will affect developers' incentives and can help to shape the way that projects are delivered.

6.23 By way of example, London's Mayor has recently published a strategy for the Thames Gateway that centres on large scale 'cultural production' – i.e. workspace for businesses that supply the theatres, museums and galleries of Central London. Almost immediately, the development sector reacted with a range of new proposals for artist workspace, a centre for immersive arts, new film studios and digital industry hubs.

6.24 A developer in Norfolk that initially set out to develop a pure tourist attraction, completely reoriented and redesigned the project when the county was awarded a 'food enterprise zone' designation. While tourism remains a focus of the project, it now includes a series of projects designed to advance the objectives of the food and agricultural industries.

6.25 In all of these cases, attracting more tourists is the secondary consequence rather than the primary objective of the strategy. And in none of these cases would the resulting impacts be captured by a conventional impact assessment designed only to monitor and track visitor spend.

Great West Way proposition is already influencing developers

We have also seen even the promise of a Great West Way influence a developer in Maidenhead.

The town is currently running a competitive process to identify a development partner for three town centre sites. One of these proposals picked up on the 'Silicon Corridor' messaging of the Borough's inward investment strategy and included a new affordable workspace and digital industries incubator in its proposal. When the Great West Way concept was announced in local press, the scope of that proposal was narrowed and targeted at digital start-ups that serve the travel trade and tourism industry.

The principle being that the Great West Way need not be simply known as tourist route with the best app or website. It can be the place where all the best tourism apps and websites are made.

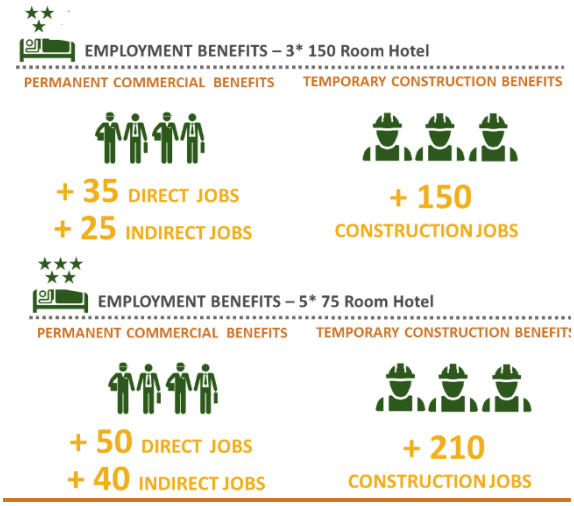
Quantifying wider impacts

6.26 The examples and case studies described above are varied and disparate and intended only to emphasise the point that the Great West Way will look beyond what is easiest to measure to maximise its total economic impact. Below we consider some more detailed scenarios that may be directly relevant to the Great West Way and are in addition to the core economic impacts discussed in the above section.

Visitor Accommodation Investment

6.27 Both the Wild Atlantic Way and the North Coast 500 have seen investment in the accommodation offer along their routes since their launch. Anecdotal evidence suggests that there is lack of accommodation along the route, for example the Wiltshire and Swindon Visitor Accommodation Futures Study carried out in 2014 suggests that there are frequent shortages of accommodation in many parts of Wiltshire during the peak summer months and at the weekends for much of the year. The study suggests that Wiltshire is lagging behind other destinations in terms of luxury country house hotels, golf resorts, boutique hotel and self-catering accommodation.

Figure 6.2 Visitor Accommodation Impacts



Source: Regeneris Consulting

6.28 Using HCA Employment Density Guidance[5] together with hotel room size guidance from the Valuation Office Agency[6], the impact of additional accommodation development can be estimated. Significant employment benefits could result from the construction of new or redeveloped visitor accommodation with the impact of a new 150 room midscale hotel and a new 75 room luxury hotel illustrated in the above infographic.

Case Study: North Coast 500 Hotel Redevelopment

Following the launch of the North Coast 500, a £140,000 investment programme was launched at The Torridon Hotel in Wester Ross. The improvements are aimed at helping push to push the hotel's quality rating towards five stars and enhance its appeal to new and emerging markets. The owners of the hotel recognised the huge potential of the North Coast 500 touring route and were keen to capitalise on the growing tourism market visiting the Highlands.

Food and Drink Investment

6.29 The Great West Way may act as a catalyst for investment in new food and drink facilities along the route. Using HCA Employment Density Guidance, the impact of an additional new restaurant opening can be estimated. Assuming a new 100 cover restaurant was opened along the route, this would provide an additional **12 direct jobs and 8 indirect jobs in the local area.**

Case Study: Wild Atlantic Food Cafe

Following the launch of the Wild Atlantic Way, the Wild Atlantic Food Café was opened between in Sligo in 2016. The café is family owned and operated and prides itself on using fresh, local

[5]https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/484133/employment_density_guide_3rd_edition.pdf

[6]http://app.voa.gov.uk/corporate/publications/Manuals/RatingManual/RatingManualVolume5/sect510/b-rat-man-vol5-s510.html

ingredients. As well as the name similarities, the company also uses a logo which has similarities with that of the Wild Atlantic Way.

Public Realm and Visitor Facility Improvement

6.30 The Great West Way may also act as a catalyst for public realm and visitor facility improvements. Local authorities, DMOs and other industry bodies (eg Canal and River Trust) recognise that visitors need to be supported with facilities and services that enhance their experience of a place.

Case Study – Wild Atlantic Way Visitor Facilities

Along the Wild Atlantic Way, almost €400,000 has been reserved for improving visitor facilities at Malin Head, the most northerly tip of Ireland and a key tourist attraction along the route. The improvement works will include road widening, the creation of additional car park spaces and improved visitor toilets. The case study below provides another example of where a local authority has invested to improve the visitor experience in a city centre.

PR and advertising equivalent value

6.31 The Great West Way has the potential to generate quantifiable benefits in terms of the media coverage. Whilst this media coverage is likely to feed through to an increase in visitor numbers, it is possible to value the coverage using advertising value equivalent benchmarks.

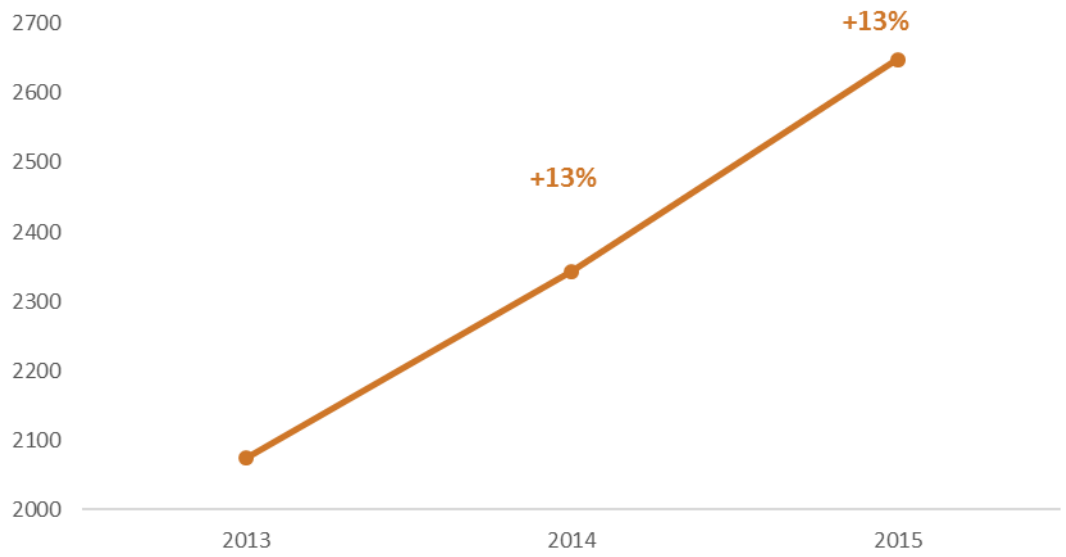
6.32 The Wild Atlantic Way has applied these benchmarks to their international media campaign to give a useful indication of the types of PR value the Great West Way could generate if it was to host a similar series of media visits.

Case Study – Advertising Value

Since the launch of the Wild Atlantic Way, Fáilte Ireland has hosted a series of international media visits to the route. In August 2014, journalists from 13 target countries (United States, Canada, Germany, France, Finland, Denmark, the Netherlands, Belgium, Switzerland, China, South Africa, India and Brazil) were invited to experience the Wild Atlantic Way for themselves. The estimated worth of the resulting media coverage was worth almost **€20m** (in equivalent advertising value) reaching an audience of 109m readers, viewers and online subscribers.

6.33 The below diagram illustrates the growth in visitor numbers from four of the targeted countries (France, Germany, US and Canada) over the promotional time period.

Figure 6.3 Visitor Number Growth from France, Germany, US and Canada to Ireland



Source: CSO Tourism and Travel

7. Environmental Impact Assessment

Summary

7.1 As part of the wider economic impact assessment, an environmental assessment has been undertaken to inform the planning process for the route. Other similar touring routes have been criticised in the past for not considering the environmental impacts of the scheme, therefore it is important to consider these impacts and mitigating factors at the earliest possible stage. The assessment is focused on a defined corridor broadly following the route of the A4, with the potential for linkages to attractions further afield. The assessment identified key environmental designations and other notable aspects of the environmental baseline along the proposed route corridor, including notable landscape, ecological and heritage designations together with other environmental constraints such as areas at risk of flooding and air quality management areas. It also identified key strategic transport links and visitor destinations.

7.2 A number of key environmental risks were identified within the environmental impact assessment, having regard to the potential for increased visitor footfall, traffic and recreational activities to affect areas designated for their landscape or heritage value (such as Areas of Outstanding Natural Beauty and World Heritage Sites) or areas of ecological value, including European designated sites (such as Special Areas of Conservation, Special Protection Areas for Birds and Ramsar sites) and UK designated sites (including Sites of Special Scientific Interest, and National / Local Nature Reserves) along the route corridor. Potential environmental risks associated with infrastructure improvements or other tourism-related development were also identified. The study also identified a series of potential high level mitigation measures which could be considered in order to manage the above environmental risks, and ensure that environmental constraints and sensitivities are taken into account at an early stage as the GWW Project is developed and progressed.

7.3 A review was also undertaken of the objectives of the GWW against a series of Strategic Environmental Assessment objectives. This confirmed the potential for increased visitor numbers to have adverse effects on biodiversity, heritage and landscapes of value if not appropriately managed, but also highlighted objectives which could help to direct visitors away from ecological, heritage and landscape areas which are already under threat and encourage the use / visitation of less sensitive areas. Opportunities were therefore identified to strengthen some of the GWW objectives having consideration to potential environmental issues. The findings from this study are outlined in the sub-sections below.

Environmental Baseline

7.4 The following key environmental designations and other relevant considerations were identified as part of the baseline review. The detailed information of relevance to each environmental consideration is set out in the separately attached environmental matrix.

7.5 The proposed route corridor contains a large number of existing established tourist ‘attractions’, together with other destinations that could be managed more positively for tourism as part of an integrated strategy for the GWW. These factors combined could result in additional visitor trips and increased environmental pressures.

7.6 The proposed route corridor also encompasses a number of strategic transportation links, all of which could be utilised for future visitor trips as part of a multi-modal approach to transportation. These include the A4 road links; the Great Western rail mainline which connects London to Bristol

and destinations further beyond; the Rivers Avon and Thames; and sections of the Kennet and Avon and Wiltshire & Berkshire Canals. Sustrans Cycle Route 4 runs from Bristol to London, and parts of the Cotswold Way, Thames Path, and Ridgeway National Trail also fall within the proposed route corridor.

Landscape Designations

Three AONBs transect the study area. These comprise:

- The southern part of the Cotswold AONB - this extends much further north outside of the proposed route corridor, with its northern extent taking in villages such as Chipping Norton, Chipping Camden and Broadway. The part within the proposed route corridor takes in much of the rural area between Bristol and Chippenham, extending southwards to Bath but excluding the city. The Cotswolds AONB Management Plan (2013-2018) reports the main pressures facing the Cotswolds AONB as including population increase and the development required for an expanding and aging population in rural areas, and traffic congestion and increasing demand for more reliable journey times to be achieved through road widening and other improvement schemes.
- The central section of the North Wessex Downs AONB - comprising the predominantly rural area to the east of Chippenham and to the west of Newbury and Reading, and incorporating Avebury, Marlborough and their nearby settlements. The North Wessex Downs AONB Management Plan (2014-2019) cites the following key issues of relevance to leisure and tourism: potential for insensitive, inappropriate or excessive tourism development to harm the special qualities of the AONB landscape; popularity of a few 'honeypot' locations with resulting sprawl of car parking, wear and tear on verges and paths, litter, and potentially intrusive traffic management measures; infrequent public transport links to and between points of access, key attractions and accommodation; poor connectivity of the rights of way network in some areas for circular walks and rides; irresponsible use of the rights of way network in some areas by motorised vehicles; noise associated with some recreation pursuits including from trail bike courses and powered aircraft affecting tranquillity and enjoyment; lack of indication such as roads signs that visitors are entering the AONB; lack of information and provision for the less able and other disadvantaged groups to access and enjoy the North Wessex Downs.
- The southern tip of the Chiltern Hills AONB - this abuts the north-eastern boundary of the North Wessex Downs AONB and takes in a number of towns and villages to the north of Reading and Maidenhead within the proposed route corridor, including Pangbourne, Henley-On-Thames and Marlow. Its overall extent reaches much further north, towards Luton, Dunstable and Aylesbury. The Chilterns AONB Management Plan (2014-2019) lists a number of influences on the natural beauty of the AONB including: development and changes in land use, with increases in population leading to more people travelling through the AONB and using it for recreation; associated pressures of urbanisation, with illegal activities such as fly tipping, and loss of tranquillity due to increases from roads, railways, aircraft and other background noise sources; and visitor pressures arising from the location of highly valued landscapes in proximity to London and other large towns, with increasing traffic levels and demand for road improvements and better infrastructure at countryside sites which could have a damaging effect on the AONB if not appropriate managed.

7.7 AONBs are subject to specific development constraints as set out in the National Planning Policy Framework (NPPF) which states that "…. great weight should be given to conserving landscape and

scenic beauty in …. Areas of Outstanding Natural Beauty which have the highest status of protection in relation to landscape and scenic beauty…"

Ecological Designation

7.8 There are a number of European Protected Sites (SPAs, SACs and Ramsar Sites) within the proposed route corridor. A number of SPAs are important for over-wintering bird species which can be sensitive to increased visitor numbers and associated disturbance from both people and dogs. The SACs are designated for the presence of qualifying habitats and / or species, and include estuarine / river habitats and species as well as terrestrial ones. Such species or habitats could also be vulnerable to increased visitor activity including disturbance, trampling, pollution and other adverse activities including littering, fly-tipping, and vandalism.

7.9 There are a large number of SSSIs throughout the proposed route corridor, which similarly range in terms of the qualifying criteria for their designation, and are susceptible to the same pressures as outlined above in relation to European designated sites. There are also a number of national and local nature reserves. Nature reserves are likely to attract more visitors, but equally are actively managed for this purpose.

Heritage Designations

7.10 There are three World Heritage Sites within the proposed route corridor - the City of Bath, Stonehenge & Avebury, and the Royal Botanical Gardens in Kew. All three attract substantial numbers of visitor trips and face particular management and development pressures, including those related to transport and access.

7.11 The main pressures currently facing the City of Bath WHS, as set out in the UNESCO on-line WHS descriptions, are large-scale development and the need for improved transport. Transport improvements are based principally around a bus-based network and pedestrianisation. Tourism is managed by Bath Tourism Plus, an independent company. The Destination Management Plan has been updated by a 'Destination Marketing Strategy' for Bath, which aims to promote growth in value of tourism rather than in volume.

7.12 The on-line UNESCO descriptions of Stonehenge, Avebury and Associated Sites states that an overall visitor management and interpretation strategy, together with a landscape strategy needs to be put in place to optimise access to and understanding of the property, with the recently completed Visitor Centre at Stonehenge a key part of this strategy. It is also important to maintain and enhance the improvements to monuments achieved through grass restoration and to avoid erosion of earthen monuments and buried archaeology through visitor pressure. Although substantial progress is being made, the impact of roads and traffic remains a major challenge in both parts of this WHS.

7.13 There are also a number of other sites designated for heritage interest across the proposed GWW route corridor, including scheduled monuments, battlefields, historic parks and gardens, and conservation areas and listed buildings. These will vary in terms of their existing tourism 'draw', but together contribute to the overall heritage value and interest within the proposed route corridor.

Air Quality

7.14 There are a number of Air Quality Management Areas (AQMAs) along the proposed route corridor, which typically coincide with key highway links which experience heavy traffic flows within urban

areas. These are designated either for nitrogen dioxide (NO2) alone, or NO2 and Particulate Matter (PM10). Any increases in traffic flows or traffic congestion within or through an AQMA could exacerbate existing air quality issues.

Flood Risk

7.15 There are flood risk areas designated in respect of a number of waterbodies within the principal route corridor, however these are typically localised and limited in extent and are not considered to represent an undue constraint.

Environmental Risks and Potential Mitigation Actions

7.16 The following presents a brief overview of key environmental risks and potential ways in which they might be mitigated, having regard to the environmental baseline summarised above.

Environmental Risks

- Issues associated with managing visitor numbers within potential 'honeypot' locations within AONBs, WHSs and other designated areas, and associated environmental pressures including traffic congestion, air pollution, litter and waste, and visual impacts and reduction in 'tranquillity' associated with large visitor numbers;
- Potential for increased disturbance associated with people and dogs within or adjacent to protected ecological areas in particular European Sites;
- Sensitivity of particular ecological species to specific impacts e.g. bats and lighting;
- Potential erosion of sites of geological interest by increased visitor numbers;
- Potential for physical damage to habitats and species of ecological importance (e.g. trampling) as a result of increased visitor numbers;
- Potential erosion upon earthen monuments and buried archaeology as a result of increased visitor numbers;
- Potential for increased vehicle emissions and reduction in local air quality should additional car journeys be attracted.

Potential Mitigating Actions

- Management of visitor numbers across the tourist season, e.g. to promote round the year tourism to reduce the effects associated with peak seasons;
- Promotion of, and investment in, lesser visited attractions to encourage linked trips and to relieve pressure on more popular attractions;
- Management to reduce specific seasonal effects (e.g. disturbance to over-wintering birds) where these may occur, with potential restrictions to access where necessary;
- Provision of identified tourist paths and trails and waymarked routes in areas of specific sensitivity to minimise the potential for direct harm to occur;
- Inclusion of interpretation boards to increase visitor understanding of attractions and their environmental sensitivities;

- Promotion of multi-modal transport strategies and encouragement of means of travel other than the private car in order to reduce traffic congestion and vehicle emissions.
- Make sure AONBs and other relevant partners are involved in discussions regarding the routes development.

Compatibility Review of Great West Way and SEA Objectives

Introduction

7.17 The purpose of this exercise was to identify any potential incompatibilities or tensions between the sustainable visitor / destination management objectives of the Project and general SEA objectives. As set out in **Section 2**, this exercise was undertaken as best practice and not as part of a formal SEA process. As the project progresses, the need for formal SEA would need to be determined.

Objectives of the Great West Way

7.18 The objectives of the GWW, as detailed by VisitWiltshire, are as follows:

- Generate short- medium- and long-term additional tourism visits and spend, increase dwell time and achieve high satisfaction along and around all parts of the route;
- Improve linkages between a range of attractions and activities;
- Use smart destination technology to provide an innovative virtual signage and interpretation solution;
- Improve private and public transport and other visitor-related infrastructure along and around the route;
- Direct visitors to less-visited areas by created branded itineraries and experiences along and around the route;
- Increase growth, productivity and partnership working via a programme that encourages stakeholders and businesses to work together on a single compelling proposition that brings benefits to all;
- Increase and improve the quality and range of product, for example attracting new accommodation in areas where supply is low;
- Work with the trade to ensure bookable product is available in target domestic and international markets;
- Be a major catalyst for change; and
- Create something new and exciting to add to England's existing offer.

Indicative SEA Objectives

7.19 The above Great West Way objectives have been subject to a comparative appraisal with the relevant 'SEA topics' (as set out in the (former) ODPM's 'Practical Guide to the Strategic

Environmental Assessment Directive' (2005)): Biodiversity, Flora and Fauna; Population and Human Health; Water and Soil; Air; Climate Factors; and Cultural Heritage and Landscape.

7.20 The associated indicative SEA objectives have been adapted from Figure 11 of Appendix 5 of the same document.

SEA Topics	Indicative Objectives
Biodiversity, Flora and Fauna	• Avoid damage and irreversible losses to designated wildlife and geological sites and protected species; • Enhance biodiversity; • Ensure the sustainable management of key wildlife sites and the ecological processes on which they depend; and • Provide opportunities for people to come into contact with and appreciate wildlife and wild places.
Population and Human Health	• Create conditions to improve health and reduce health inequalities; • Promote healthy living; • Protect and enhance human health; • Decrease noise and vibration; and • Increase opportunities for recreation and exercise.
Water and Soil	• Prevent water pollution; • Minimise impacts on water abstraction, run-off and recharge; • Reduce contamination, and safeguard soil quality and quantity; and • Minimise waste, then re-use or recover it through recycling, composting.
Air	• Minimise air pollution; and • Reduce the need to travel by private car.
Climate Factors	• Reduce greenhouse gas emissions, and • reduce vulnerability to the effects of climate change e.g. flooding, disruption to travel by extreme weather, etc.
Cultural Heritage and Landscape	• Preserve historic buildings, archaeological sites and other culturally important features; • Protect and enhance the landscape, particularly in designated areas; • Value and protect diversity and local distinctiveness; and • Improve the quantity and quality of publicly accessible spaces.

Objective Compatibility Review

7.21 The separately attached compatibility assessment matrix presents the findings of the SEA and GWW Objective Compatibility Review.

7.22 The main findings / recommendations from this assessment are as follows:

- Objective 1 aims to increase visitor numbers which could have adverse effects on biodiversity, heritage and landscapes of value if not appropriately managed;
- Objectives 2 and 5 could help to direct visitors away from ecological, heritage and landscape areas which are already under threat and encourage use / visitation of less sensitive areas;
- Objective 4 (as well as Objective 5) need to prioritise routes / options which promote the use of public transport, cycling and walking to reduce increase in private car use and associated emissions.

- Objective 6 could be strengthened by adding 'including environmental benefits' to the end of the objective.
- There is uncertainty over a number of potential effects, mainly due the full scope of the Project and the extent of any potential interventions and associated infrastructure being unknown at this stage of the Project. Further consideration will be required as the Project progresses.
- There is the potential for cumulative effects on ecology, heritage and landscape designations due to incremental effects from a number of interventions. This also needs to be considered further as the Project progresses.

Identification of Priorities for Further Research and Activity

7.23 Once the Project is more defined in terms of scope, the following should be undertaken:

- Further environmental review to refine potential environmental impacts. This would include more detailed review of the risks to designated sites and further consideration of the scope of the Project and associated interventions / infrastructure.
- Habitats Regulations Assessment (HRA) Screening to determine the potential for impacts, including cumulative impacts, on designated European nature conservation sites, specifically related to increased visitor pressure.
- SEA Screening to determine the need for formal SEA. This needs to be considered early in the process to ensure that, if required, the SEA is undertaken in parallel with the plan making process.
- Review of any likely infrastructure improvements or other developments associated with the Project to determine the potential need for specific environmental studies or reports to support the approvals process.

8. Project Funding and Spend

Timescales

8.1 Despite the requirement for the Discover England funding to be spent by March 2019, a project of this scale is likely to have on-going inputs and outcomes for a much longer time period. For the economic impact assessment, we have assessed the project over a period of 10 years with upfront funding within the first 2 years used to develop the route itineraries and branding, followed by ongoing revenue costs per year for the following 8 years.

Funding Requirements

8.2 We have considered four potential funding options for the economic impact assessment

- Option 1: Do Nothing (assumes £0 DE funding)
- Option 2: £1.0m DE Funding
- Option 3: £1.5m DE Funding
- Option 4: £2.0m DE Funding

8.3 This funding will be further supported by match funding (cash and in-kind) as well as additional marketing support from DMOs along the route. This total cash funding in the table below represents the minimum requirement of the fund. The assumptions for funding under each scenario are outlined in the table below.

Table 8.1 Funding Assumptions

	Upfront				Ongoing
Scenario	**Discover England Funding**	**Total Match Funding**	**Of Which is Cash Match Funding**	**Total Cash Funding**	**Additional DMO Contributions (year 2+)**
Do Nothing	£0	£60K	£60k	**£60K**	£0K
£1m DE Funding	£1m	£400K	£200K	**£1.2m**	£250K
£1.5m DE Funding	£1.5m	£600K	£300k	**£1.8m**	£500K
£2m DE Funding	£2m	£1m	£400k	**£2.4m**	£750K

8.4 These assumptions are based on outline commitments to funding made by project partners and stakeholders. In reality the amount of match funding and additional DMO contributions will be higher than the figures suggested.

8.5 Based on our case study analysis of similar touring routes, in particular the Wild Atlantic Way, we have developed an evidence base of fixed and variable costs associated with route development. These cost estimates are illustrated in the table below.

Table 8.2 Cost Estimations

Type of Intervention	Cost Estimate
Basic Website Development	£50-80K
Complex Interactive Website	£80-150K
App Development	£50K
Website Content (text, maps, photos, booking)	£100-200K
Brand Development	£10K-£200K+

Itinerary Development	Varies depending on route length
Physical Signage	£800 per sign, £20,000 per discovery point
Networks & Marketing (to travel trade)	£100K
Networks & Marketing (to travel trade & consumer)	£500K+
International Ad Campaign	£200K
Welcome Training Programme	£150-250K
Business Support	£50-100K
Integrated Rail Pass	£200-300K

8.6 In the following table we have outlined where the funding and cash match funding could be spent, depending on the scale of funding received. It is important to note that these are illustrative figures only and a more detailed cost assessment would need to take place in which quotes were received for specific aspects of work.

Figure 8.1 Funding and Spend Breakdown

Upfront Spend (2017-2019)		*Ongoing Spend Per Year (Year 2+)*	
Do Nothing Scenario (+ match)		**Do Nothing Scenario**	
Branding	£ 10,000	N/A	£ -
Itinerary development	£ 30,000		
Marketing	£ 20,000		
Total	**£ 60,000**	**Total**	**£ -**
£1m DEF Funding (+ cash match)		**£1m DEF Funding (+ cash match)**	
Evaluation & Research Budget	£ 55,000	Website Maintenance & Content	£ 20,000
Accommodation Study	£ 25,000	Ongoing Marketing	£ 150,000
Brand development	£ 100,000	Itinerary development	£ 50,000
Itinerary development	£ 250,000		
Simple Website development	£ 70,000		
Content	£ 120,000		
Networks	£ 200,000		
Marketing	£ 200,000		
Ticketing/Passes Product development	£ 140,000		
E-signage Research and Development	£ 40,000		
Total	**£ 1,200,000**	**Total**	**£ 220,000**
£1.5m DEF Funding (+ match)		**£1m DEF Funding (+ cash match)**	
Evaluation & Research Budget	£ 65,000	Website Maintenance & Content	£ 40,000
Accommodation Study	£ 25,000	Ongoing Marketing	£ 190,000
Brand development	£ 150,000	Itinerary development	£ 70,000
Itinerary development	£ 280,000	Welcome Programme	£ 20,000
Website development with integrated booking system	£ 90,000	Signage	£ 20,000
Content	£ 200,000		
Networks	£ 300,000		
Marketing	£ 300,000		
Welcome Training Programme	£ 150,000		
Ticketing/Passes Product development	£ 200,000		
E-signage Research and Development	£ 40,000		
Total	**£ 1,800,000**	**Total**	**£ 340,000**
£2m DEF Funding (+ match)		**£2m DEF Funding (+ cash match)**	
Evaluation & Research Budget	£ 65,000	Website Maintenance & Content	£ 50,000
Accommodation Study	£ 25,000	Ongoing Marketing	£ 220,000
Brand development	£ 150,000	Itinerary development	£ 100,000
Itinerary development	£ 300,000	Welcome Programme	£ 30,000
Website development with integrated booking system	£ 100,000	Signage	£ 40,000
Content	£ 200,000	Business support	£ 20,000
Networks	£ 300,000		
Marketing	£ 300,000		
International Ad Campaign	£ 200,000		
Welcome Training Programme	£ 200,000		
Business Support service set up	£ 80,000		
Ticketing/Passes Product development	£ 280,000		
E-signage Research and Implementation	£ 200,000		
Total	**£ 2,400,000**	**Total**	**£ 460,000**

Source: Regeneris Consulting

Potential Funding Options

Leveraging Funds

8.8 It will be challenging to adopt an appropriate destination management revenue model for a route destination like the Great West Way which does not conform to traditional geographical or political boundaries.

8.9 The case studies carried out by TEAM (November 2016) highlight that all the route examples have benefitted from comprehensive investment i.e. capital investment in infrastructure, supported by marketing and product development where appropriate.

8.10 However, those that became a real game changer proposition were the route developments that successfully leveraged funds and exposure. For example, Margaret River, a self-drive route in Western Australia, has done a great job in linking food and tourism sectors. Of 800 business members, 120 are wine producers. Its principal external funding programme (from a rural development agency) includes targets for increased volumes of wine sales as well as visitation and expenditure outcomes. Margaret River also benefited from the fact that its food & drink work coincided with the national tourism organisation, Tourism Australia, championing food and drink as a central component of its marketing strategy and investment. Margaret River as a destination would not have achieved the same level of impact without successfully leveraging the extended reach provided by national and international marketing.

8.11 There are already examples of where the Great West Way initiative has begun to leverage funding from alternative sources. For example, the route has already seen a Wiltshire town pass the expression of interest stage to receive LEADER funding for a Great West Way related project. In addition, the project has already started to attract additional funding from industry partners including DMOs and AONBs.

BID Leveraging

8.12 What the TEAM case studies do not bring to light is how much additional revenue funding can be leveraged for destination management. This is partly because many of the route developments selected for the case studies, together with the Great West Way route itself are still too young to draw such conclusions. But even for more established destinations, such information is often not available (other than readily available examples of return on investment realised in marketing campaigns e.g. the highly successful 'This is Great' campaign, run by VisitBritain which has so far delivered £1.2bn direct return on the back of £113.5 million investment).

BIDs leveraged 48p of external funding for every £1 invested by their members

8.13 Perhaps the best and nearest example can be gleaned from Business Improvement Districts (BIDs). The 2016 Nationwide Business Improvement District (BID) Survey, which covers 216 BIDs across the UK and Ireland, found an average leverage factor level of 1.48, that is BIDs in total increased the income into their community by 48% above the levy income received from their own BID members. The leverage factor is highest among London BIDS, which achieved a leverage factor of 1.78. Plymouth Waterfront BID achieved the absolute highest leverage factor (2.13), albeit based on comparatively low numbers, attracting £437,000 additional income in addition to £205,000 levy income.

8.14 For most BIDs, additional revenue, over and above the levy income, comes from two to three sources, with their respective Local Authority often still one of those, and often the largest. Other sources of additional revenue include voluntary contributions from businesses, sponsorship, contributions from central government and contributions from property owners.

8.15 Additional income attracted across all 216 BIDs in the UK and Ireland in 2016 was £7,372 for those in the lower quartile (with £250 as the absolute lowest) and as much as £2,500,000 for those in the upper quartile. Average additional income was £89,974.

8.16 Beyond the direct additional income, BIDs were invited to report on inward investment income, which is financial investment in their location that did not go directly through their bank account but is as a direct result of catalytic activity of the BID. Although such investment is very difficult to quantify, a total of 47 BIDs reported investment income as a direct result of their BID activity. The largest amount of inward investment (£4,600,000) was realised by Colmore Business District (Birmingham).

On average these 47 BIDs attracted £566,010 in inward investment.

8.17 A further source of funding is derived from match funding that does not come via direct cash but instead pro bono support, or in-kind support, such as free office space or venues; staff support from secondments, staff volunteers; marketing, design and events support; advertising value; free accounting and legal support; and levy collection service provided free of charge. For many BIDs, such in-kind income amounts to an important input. Whilst 7 BIDs received more than £100,000 in-kind contribution, the average (among the 62 BIDs that did receive in-kind contributions in 2016) was £41,853.

8.18 The table below summarises the totality of BID levy funding, additional funding, investment and in-kind funding and highlights the average leverage factor on the levy income.

Table 8.3 Business Improvement District Funding

	Levy Income	Additional Income	Inward Investment	In-kind Contributions	Totals
Average	£419,885	£89,974	£566,010	£41,853	£572,125
Lower quartile	£134,250	£7,372	£28,837	£6,125	£138,863
Upper quartile	£3,730,000	£2,500,000	£4,600,000	£500,000	£5,451,965
Total	£75,579,270	£13,586,025	£20,376,357	£2,594,858	£112,136,510
Total non-levy		£36,557,240			
Leverage factor	1.48				

Nationwide Business Improvement Districts Survey 2016

9. Management Context

9.1 The Destination Management Organisation, VisitWiltshire, are leading the development of the Great West Way touring route and are the accountable body for the programme.

Delivery Programme

- **October 2016**: VisitWiltshire receives £250,000 Round 1 funding from VisitEngland's Discover England Fund
- **November 2016 – March 2016**: proposition and brand positioning research
- **December 2016**: case study research
- **January-March 2017**: consultation and concept testing
- **March 2017**: impact study and interactive model produced
- **March 2017**: creation of three pilot itineraries
- **March 2017**: Business Case application for Round 2 Discover England funding
- **2017-2018**: development of 5-year operational programme
- **2017-2018:** develop brand guidelines and programme of engagement with industry
- **2017-2018:** detailed environmental and accommodation study
- **2017-2018**: website development with sophisticated mapping
- **2017-2019:** development of programme of bookable routes, marketing direct to consumer and trade
- **2017-2019:** development of inspirational content
- **2019:** programme evaluation

Progress to Date

9.2 The project is now approaching the end of Round 1. It is now in the process of applying for Round 2 funding to take the project forward, develop new itineraries and market the product.

9.3 The project will continue to be taken forward by VisitWiltshire, led by David Andrews.

Project Resources

9.4 A Steering Group has been set-up to help guide development of the Great West Way. There have been 3 steering group meetings to date with representatives attending from DMOs along the route, visitor attractions, transport organisations and VisitEngland.

9.5 A DMO working group has also been set up consisting of all the DMOs along the route which meets quarterly to discuss the projects progress and opportunities.

Governance

9.6 As well as additional expenditure by inbound tourists, the Great West Way can also help to advance a wider set of regional and LEP economic objectives, not least in terms of placemaking, improved

quality of life, and new inward investment. These impacts – though difficult to track and quantify – could conceivably be even greater.

9.7 These secondary effects will often occur by virtue of the fact that the imagery and brand collateral that supports a competent tourism strategy is typically the same or similar to the collateral used to support an inward investment or place marketing strategy. The Great West Way offers the possibility of taking greater control of this relationship and doing things deliberately and thoughtfully that have traditionally been left to chance.

9.8 Put differently, there is an opportunity for the Great West Way to reflect a wider set of economic agendas and objectives than tourism strategies have traditionally done. It is common and expected for any regional tourism strategy to reflect its 'parent' national strategy, on one hand, and its subsidiary local tourism strategies, on the other. What is less common – and therefore a potential opportunity – is for a tourism strategy to deliberately take on board and reflect the intentions and objectives of parallel economic and inward investment strategies.

9.9 By way of example:

- If the local economic strategy prioritises the automotive industry (e.g. South Oxfordshire), then the tourism strategy might try to encourage 'drive experiences' in partnership with major manufacturers and motor sport brands
- If the local inward investment strategy explicitly targets digital media industries (e.g. Windsor & Maidenhead), then the tourism strategy might similarly seek to attract those digital start-ups that specifically sell to the travel trade and tourist businesses
- If a local place brand highlights the area's competence with VR and augmented reality (e.g. Bristol and Bath), then the tourism strategy might seek to support this objective by encouraging the use of these showcase technologies within the tourism product and programme.

A potential opportunity to link a new tourism strategy with parallel economic and inward investment strategies

9.10 For the Great West Way seek to explore these opportunities, defining and executing a strategy that is explicitly and deliberately anchored in the region's economic strategies, then there are inevitable implications for governance. These need to be fully explored within the partnership, but at this stage, it is already encouraging to note the following:

- Considered thought that has been given to the wider economic impact of The Great West and its potential to impact the economy in ways that are not captured by a narrow assessment of visits and spend
- Early and meaningful engagement with local and regional authorities and the LEPs, as well as the DMOs
- Six of the LEPs have already provided encouraging letters of support and the LEPs have been invited to join the Steering Group
- In the short term, there is a direct connection between the Great West Way and the LEP via the Board's chairmen who sits on both the VisitWiltshire and LEP boards and serves as the DMO/LEP representative on the Tourism Alliance Board. That said, the individual LEPs have a standing invitation to take a more active role as the project advances

Risk Register

Risk Assessment			
Risk	**Risk Consequence**	**Likelihood /impact**	**Mitigation**
A reduction in funding levels	Reduction in product development/ route itineraries/ content and marketing	Medium /Medium	Alternative levels of funding have been tested within the sensitivity analysis. Careful financial planning and market research will ensure any funding received is put to the best possible use. Efforts will also be made to achieve maximum private sector leverage.
Lack of on-going revenue funding to maintain the route	Reduction in future content, route development, maintenance and marketing activity	Medium /High	VisitWiltshire have already engaged with multiple public and private sector partners who have verbally committed to funding the project over the long term. Efforts will also be made to encourage a more joined up approach between DMOs which will leverage further funding.
Visitors are not attracted to the route	Visitors are not attracted to the route and the project delivers limited economic benefits	Low /High	Careful market analysis, a compelling offer, a strong brand, and robust project management will ensure that the Great West Way delivers an attractive proposition that will draw in new visitors.
Difficulty in attracting international tourists	International visitors are not attracted to the route which impacts visitor spend and economic benefits	Low /High	International marketing campaigns will be carried out in targeted markets. Relationships will be formed with international travel trade organisations to directly promote the route. To date, relationships have already been formed with a number of travel partners.
Visitor spend along the route is limited	A lack of spend along the route will result in limited economic benefits for the area	Low /High	There will be an emphasis on slow tourism and encouraging tourists to explore 'hidden gems' which will encourage visitor spend. In addition, VisitWiltshire will deliver a training programme to local SMEs to help them benefit from increased tourist numbers. There will also be food/drink/leisure/ accommodation services advertised on the website.
Lack of accommodation	A lack of accommodation	Low /Medium	A visitor accommodation supply and demand study is to be

options for tourists along the route	options could discourage overnight stays and therefore limit local spend		commissioned in stage 2. The Great West Way will also promote round the year tourism to reduce the effects associated with peak seasons.
Increase in congestion along the route	This could have a negative impact on both visitors and the local population.	Medium /Medium	The Great West Way will focus on a multi-modal joined up travel approach. More sustainable transport options (train, ferry, cycling, walking) will be made more accessible to tourists.
Issues associated with managing visitor numbers within potential 'honeypot' locations	Associated environmental pressures and visual impacts could have a negative impact on both visitors and the local population	Medium /High	The route will promote round the year tourism to reduce the effects associated with peak seasons. In addition, lesser visited attractions will be promoted to encourage linked trips and to relieve pressure on more popular attractions.
Potential for increased disturbance associated with people and dogs within or adjacent to protected ecological areas	Potential ecological damage caused	Medium /Low	Identified tourist paths and trails and waymarked routes will be provided where necessary in areas of specific sensitivity to minimise the potential for direct harm to occur.
Sensitivity of particular ecological species to specific impacts e.g. bats and lighting;	Potential ecological damage caused	Medium /Low	Care will be taken to reduce specific seasonal effects (e.g. disturbance to over-wintering birds) where these may occur, with potential restrictions to access where necessary.
Potential erosion of sites of geological interest by increased visitor numbers	Potential ecological damage caused	Medium /Low	Interpretation boards to be included where necessary to increase visitor understanding of attractions and their environmental sensitivities. Identified tourist paths and trails and waymarked routes will also be provided where necessary in areas of specific sensitivity to minimise the potential for direct harm to occur.
Potential for physical damage to habitats and species of ecological importance	Potential ecological damage caused	Medium /Medium	Interpretation boards to be included where necessary to increase visitor understanding of attractions and their environmental sensitivities.
Potential erosion upon earthen monuments and buried archaeology	Potential ecological and historical damage caused	Medium /Low	Interpretation boards to be included where necessary to increase visitor understanding of attractions and their environmental sensitivities.

Potential for increased vehicle emissions and reduction in local air quality	Potential environmental damage and negative impact on local population's quality of life	Medium /Medium	The Great West Way will focus on a multi-modal joined up travel approach. Encouragement of means of travel other than the private car in order to reduce traffic congestion and vehicle emissions.

Appendix A - Environmental Assessment Methodology

Overview and Study Area

A.1 The Study commenced with a review of the GWW proposed route corridor as supplied by Regeneris (refer to the map section of the report).

A.2 In order to streamline the assessment and reporting process, the proposed route corridor was broken into four separate sub-sections, guided by local authority administrative boundaries. From west to east, these are broadly as follows:

- Area 1: Bristol / Bath Environs - comprising the western end of the study area to the eastern boundary of the South Gloucestershire and Bath & North East Somerset administrative areas;
- Area 2: Wiltshire Environs - comprising that part of the study area from Bradford-on-Avon and Corsham in the west to a point east of Marlborough, and broadly following the boundary of the Wiltshire administrative area;
- Area 3: Berkshire Environs - comprising that part of the study area running from Hungerford and Lambourn in the west to a point west of Reading and Wokingham, and taking in the central and southern parts of West Berkshire and the northern tip of Basingstoke & Deane administrative areas.
- Area 4: Home Counties Environs - comprising that part of the study area running from the vicinity of Wallingford / Reading / Wokingham in the west to the vicinity of Windsor and Eton in the east, and taking in the administrative areas of Reading, Wokingham, Windsor & Maidenhead, Slough, and small parts of Oxfordshire County and Bracknell Forest.

A.3 The Study was then undertaken in the following four stages, which were devised as an appropriate response to the Project Brief, and agreed in advance with VisitWiltshire. Emerging outcomes and initial findings were reviewed with VisitWiltshire following the first two stages, prior to the completion of the overall Study.

Identification of Environmental Considerations, Opportunities and Recommendations for Action

A.4 The assessment commenced with a high level desk-based review of environmental designations and other notable aspects of the environmental baseline along the proposed route corridor (refer to Appendix A). Environmental information was collated from the following online sources:

- 'MAGIC' (Multi-Agency Geographical Information for the Countryside) http://www.natureonthemap.naturalengland.org.uk/;
- Environment Agency online flood map http://apps.environment-agency.gov.uk/wiyby/37837.aspx;
- Defra AQMA's interactive map https://uk-air.defra.gov.uk/aqma/maps;

- Historic England GIS data download https://historicengland.org.uk/listing/the-list/data-downloads/;
- Aerial photography / Googlemaps https://www.google.co.uk/maps; and
- Information on relevant local authority websites.

A.5 The following information was identified and collated for the four sub-sections of the GWW proposed route corridor referred to above:

- Landscape designations - e.g. Areas of Outstanding Natural Beauty (AONBs);
- Ecological designations - European Designated Sites (SACs / SPAs / Ramsar sites); National Designated Sites (SSSIs) and National and Local Nature Reserves;
- Heritage designations - World Heritage Sites (WHSs); Conservation Areas; Listed Buildings / Scheduled Monuments / Registered Parks and Gardens / Battlefields (with the exception of WHSs, these were identified in general terms, with selected key examples highlighted);
- Air Quality Management Areas; and
- Areas at Risk of Flooding.

A.6 Key strategic transport links (e.g. roads, railway lines / stations, waterways, and any notable sustainable transport routes) and key visitor destinations were also identified, in order to provide an appropriate baseline for the subsequent assessment.

A.7 The above were recorded in tabular spreadsheet format, as presented in the Environmental Matrix spreadsheet and reported in summary form in the environmental section of this report.

Identification of Main Environmental Assessment Risks and Mitigating Actions

A.8 The above baseline data provided the basis for a review of relevant considerations, constraints and opportunities.

A.9 A brief commentary was then prepared, to identify those environmental features that could potentially be at risk from the Project outcomes, together with an indication of the types of mitigation measures that could ameliorate them. This comprised a high level identification, using bullet form commentary.

Description of Main Issues Related to Sustainable Visitor / Destination Management and Mitigating Actions

A.10 In parallel to the identification of main environmental risks and mitigating actions, a brief assessment of the objectives of the Great West Way against a series of Strategic Environmental Assessment (SEA) objectives was undertaken. These objectives were adapted from Figure 11 of Appendix 5 of the (former) ODPM's 'Practical Guide to the Strategic Environmental Assessment Directive' (2005). These objectives have regard to the following established SEA 'topics' (taking into account the high level environmental baseline identified in the preceding exercise):

- Biodiversity, flora and fauna;
- Population and human health;

- Water and soil;
- Air;
- Climate factors; and
- Cultural heritage and landscape.

A.11 The purpose of this exercise was to identify any potential incompatibilities or tensions between the sustainable visitor / destination management objectives of the Project and general SEA objectives.

Identification of Priorities for Further Research and Activity

A.12 Finally, a number of priorities for further research and activity were identified, having regard to the outcomes of the preceding exercises outlined above. This included a brief overview of the likely issues that could give rise to a requirement for detailed / formal environmental assessment, including Environmental Impact Assessment (EIA) and Habitats Regulations Assessment (HRA).

Appendix B - Environmental Considerations and Opportunities Matrix

Great West Way Environmental Considerations and Opportunities															
Environmental Designations	**Area 1**			**Area 2**			**Area 3**			**Area 4**					
AONBs	Cotswolds	This site is interesting for both its geomorphological (oolitic limestone) context (which provides the local stone characteristic of its villages) and the wide selection of habitats it supports such as unimproved limestone grassland. The AONB lies to the north, east and south-east of Bath (excluding the urban area) and stretches northwards taking in the rural area to the east of Bristol (east of Pucklechurch and Chipping Sodbury) and beyond the study area. The Cotswolds AONB is a popular visitor destination, accessible to a large catchment area including Bristol, London and the West Midlands, and attracts local, national and international visitor trips, particularly its 'honey pot' villages such as Bourton-on-the-Water, Bibury and Castle Combe. The Cotswold Way National Trail, which runs between Bath and Chipping Campden, and a number of other walking routes, extend across the AONB.			Cotswolds	This site is interesting for both its geomorphological (oolitic limestone) context (which provides the local stone characteristic of its villages) and the wide selection of habitats it supports such as unimproved limestone grassland. See Area 1 for more details. The AONB takes in the villages in the very western part of Area 2, including Limpley Stoke, Box, Slaughterford, and villages further north outside the study area.		North Wessex Downs	This site is notified for both its geomorphological and biological interest, supporting nationally important lichen flora, and comprising one of the largest tracts of chalk downland in southern England. See Area 2 for more details. The AONB covers a significant part of Area 3, stretching from the western boundary with Area 2 to a point just west of Newbury, and then curving round Newbury and its adjacent villages to cover the remaining northern part of Area 3 to a point adjacent to the western boundary of Reading.		Chilterns	The Chilterns contain an important diversity of habitats ranging from chalk grassland and to the country's most extensive areas of beech woodland. The landscape also contains many prehistoric traces. The AONB boundary skirts urban areas and while there is a high level of out-commuting from its towns and villages, commercial forestry and agriculture remains an important part of the economy. The AONB abuts and extends to the north of settlements such as Pangbourne, Henley-On-Thames and Marlow which lie within the principal route corridor, but extends much further to the north towards Luton / Dunstable / Aylesbury. Due to its proximity to London and the Home Counties, the Chilterns AONB is one of South-East England's major recreation resources. Leisure use is largely informal scenic drives, walking and riding, and peak demand puts heavy pressure on viewpoints. The Ridgeway, a National Trail, runs through the AONB from Ivinghoe Beacon (near Dunstable, Beds) to the River Thames and on into the North Wessex Downs AONB. The Thames Path National Trail also passes through the southern part of the AONB.		
				North Wessex Downs	This site is notified for both its geomorphological and biological interest. It supports nationally important lichen flora. It comprises one of the largest tracts of chalk downland in southern England and is relatively unaffected by existing development, with agriculture being the major land use in the AONB. As well as downland habitat and ancient woodland the areas is of archaeological significance, with a large number of barrows and other prehistoric features including the neolithic stone circle at Avebury. It stretches from points to the east of Calne and Devizes taking in much of the remainder of Area 2.										
SPA / SAC / Ramsar	Severn Estuary (SPA)	The site is of importance during the spring and autumn migration periods for waders moving up the west coast of Britain, as well as in winter for large numbers of waterbirds, especially swans, ducks and waders. This site qualifies as an SPA by supporting populations of European importance of overo-wintering Berwick's Swan (listed on Annex I of the Directive) together with the following other species: curlew,dunlin, pintail,redshank, shelduck (over-wintering); ringed plover (on passage) and an overall assemblage of at least 20,000 waterfowl.	Along estuary to the west and north-west of Bristol	Bath and Bradford on Avon (SAC)	Supports greater horseshoe bat *Rhinolophus ferrumequinum* , and Bechstein's bats M*yotis bechsteinii,* which are Annex II species that are a primary reason for designation as a SAC and lesser horseshoe bats *Rhinolophus hipposideros* which are a qualifying feature.	Composite site with several identified locations in the vicinity of Bathampton, Batheaston, Box, Bradford-on-Avon	Kennet Valley Alderwoods (SAC)	Comprise the largest fragments of alder-ash woodland on the Kennet floodplain. The Annex I habitats which are the primary reason for SAC designation are alluvial forests with Alnus glutinosa and Faxinus excelsior.	East of Hungerford	Chilterns Beechwoods (SAC)	Represent a very extensive tract of *Asperulo-Fagetum* beech forests in the centre of the habitat's UK range (Annex I habitat). Semi-natural dry grasslands and scrubland facies on calcerous substrates are also a qualifying feature. Presence of Stag Beetle *Lucanus cervus* represents a qualifying species.	North west of Maidenhead
	Severn Estuary (SAC)	A key migration path for fish between sea and river via the estuary. Includes the following Annex 1 Habitats that are a primary reason for SAC designation: estuaries, mudflats and sandflats not covered by seawater at low tide, atlantic salt meadows. Includes the following Annex II species that are a primary reason for designation: sea lamprey, river lamprey, twaite shad.		Pewsey Downs (SAC)	This site is situated on the southern edge of the Marlborough Downs on the Wiltshire chalk, and hosts the priority habitat type 'orchid rich sites'. SAC designated due to semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites) which comprises the Annex 1 habitat resulting in its designation as a SAC. Also has a signficant population of early gentian.	South west of Marlborough, north east of Devizes	Kennet and Lambourn Floodplain	This cluster of sites selected in the Kennet and Lambourn valleys supports one of the most extensive known populations of Desmoulin's whorl snail *Vertigo moulinsiana* (an Annex II species) in the UK and is one of two sites representing the species in the south-western part of its range in the important chalk stream habitat.	Composite site, to the north and east of Hungerford,and east of Newbury	Burnham Beeches	An example of *Atlantic acidophilous* beech forests in central southern England. It is an extensive area of former beech wood-pasture with many old pollards and associated beech *Fagus sylvatica* and oak *Quercus* spp. high forest. Also one of the richest sites for saproxylic invertebrates in the UK, and retains nationally important epiphytic communities, including the moss *Zygodon forsteri* .	North of Slough
	Severn Estuary (Ramsar)	As above.		River Avon (SAC)	Comprises a large, lowland river system that includes sections running through chalk and clay, with transitions between the two. Stream water-crowfoot Ranunculus penicillatus ssp. pseudofluitans and river water-crowfoot R. fluitans are the main dominant Annex I species that merit its designation as a SAC, together with a number of Annex II species including sea lamprey, brook lamprey, atlantic salmon, bullhead, and desmoulin's whorl snail.	Scattered locations in the vicinity of Pewsey, to the south of Marlborough	River Lambourn (SAC)	The River Lambourn is a classic example of a lowland chalk river and includes Annex 1 habitats pond water-crowfoot *Ranunculus peltatus* and species variants. The Lambourn also represents bullhead *Cottus gobio* (Annex I species) populations inhabiting chalk streams in central southern England and Annex II species Brook lamprey *Lampetra planeri.*	Flows north-west to south-east through the route corridor via Newbury	Windor Forest and Great Park (SAC)	Windsor represents old acidophilous oak woods in the south-eastern part of its UK range (Annex I habitat) with the largest number of veteran oaks in Britain. Of importance for its range and diversity of saproxylic invertebrates, including many rare species (e.g. the beetle *Lacon querceus*) and has recently been recognised as having rich fungal assemblages. Atlantic acidophilus beech forests are also a qualifying factor. The site is also thought to support the largest of the known populations of violet click beetle (Annex I species) in the UK.	South of Wndsor
	Avon Gorge Woodlands (SAC)	Supports nationally rare plants and includes Leigh Woods. Avon Gorge is representative of Tilio-Acerion forests in south-west England on the limestone cliffs and screes of a large river gorge, and is important because of the high concentration of small-leaved lime, the presence of rare whitebeams including two unique to the Avon Gorge, and other uncommon plants, such as green hellebore (Annex 1 habitats which comprise a primary reason for selection of the site as an SAC).	West Bristol				Thatcham Reedbeds (SAC)	Wetland habitats include reedbeds, species rich fen, wet woodlands, standing and running water. There are large numbers of the internationally rare Desmoulins whorl snail.	East of Newbury	South West London Waterbodies (SPA / Ramsar)	Comprises a series of embanked water supply reservoirs and former gravel pits that support a range of man-made and semi-natural open water habitats. The reservoirs and gravel pits function as important feeding and roosting sites for wintering wildfowl, in particular Gadwall *Anas strepera* and Shoveler *Anas clypeata* , both of which occur in numbers of European importance.	South east of Slough
	Chew Valley Lake (SPA)	Comprises a large, shallow, artificial reservoir with some fringing reedbeds, carr woodland and grassland. The water conditions are eutrophic and open water plant communities are rather sparse. The open water of the reservoir and its margins are of greatest value for wintering waterbirds. The site qualifies as an SPA by supporting populations of European importance of over-wintering shoveler.	To the south of Bristol				Hartslock Wood (SAC)	Comprises a mixture of habitats including an area of species-rich chalk downland and one of the few examples of ancient yew wood in the Chilterns, as well as semi-natural broadleaved woodland, chalk scrub and riverine fen. The site also hosts the priority habitat type 'orchid rich sites', including one of only three UK populations of monkey orchid *Orchis simia* .	North of Pangbourne			
SSSI	Bickley Wood	The most extensive exposure of Carboniferous Downend Group strata in the Bristol Coalfield.	To the east of Bristol	Bencroft Hill Meadows	An area of unimproved pasture of exceptional botanical quality; one of the most species-rich examples in southern England.	To the west of Chippenham	Highclere Park	Extensive open parkland of unimproved grassland with mature trees, pasture woodland and lakes.	Highclere	Black Park	Consists of a variety of habitats comprising dry and wet heath, alder carr, mixed and coniferous woodland and small areas of acid grassland. The heathland and alder carr are of particular importance, as both habitats are very rare in Buckinghamshire. They support specialised communities of plants and animals, including many that are rare or uncommon in the county.	North east of Slough
	Ashton Court	Supports nationally rare invertebrates.	To the west of Bristol	Box Mine	Extensive man made tunnels used by bats for hibernation, mating and as a staging post prior to dispersal.	To the west of Corsham	Aldermaston Gravel Pits	Mature flooded gravel working affording habitats for breeding birds and rugure for water fowl.	To the east of Woolhampton	Bray Pennyroyal Field	Comprises a single field adjoining the River Thames to the south-east of Bray and represents the sole Berkshire locality for the nationally rare pennyroyal *Mentha pulegium* .	To the north west of Windsor
	Court Hill	This site shows a deep channel (widening to the north) cut in the Carboniferous Limestone of the Failand Ridge. Site of geological Interest.	To the west of Bristol	Brown's Folly	Imporant for hibernating bats and supports calcareous grassland community.	To the north-east of Bath	Ashford Hill Woods and Meadows	Comprises an extensive and varied complex of woodlands and agriculturally unimproved meadows lying in a broad shallow valley on the London Clays and Lower Bagshot Beds. Includes ancient species-rich coppice woodland, secondary woodland, hay meadows, grazed meadowland, and peaty flushed area.	To the south of Woolhampton	Cannoncourt Farm Pit	This pit worked gravels of the Lynch Hill Terrace of the Thames, and has yielded large numbers of Palaeolithic implements since the beginning of the century.	To the north of Maidenhead

Great West Way Environmental Considerations and Opportunities

Environmental Designations	Area 1			Area 2			Area 3			Area 4		
SSSI	Cleeve Wood, Hanham	Situated on the steep south facing slopes of the River Avon valley near to Bristol. Supports particularly large population of Bath Asparagus *Ornithogalum pyrenaicum*.	In the centre of Bristol	Calstone and Cherhill Downs	Extensive area of herb-rich chalk grassland of exceptional botanical quality supporting diverse range of invertebrates.	To the west of Avebury	Avery's Pightle	Consists of a small, flat, low-lying field supporting a species-rich unimproved meadow community.	To the south west of Newbury	Cock Marsh	A site exhibiting a transition in a relatively small area from wet alluvial grassland, through calcareous grassland on a steep north-facing slope to more acidic grassland on clay at the top of the slope.	To the north of Maidenhead
	Gordano Valley	A wide range of fauna and flora has been recorded including long eared owls, brown hare and more than 130 species of flowering plants.	To the west of Bristol	Catmore and Winterly Copses -	Old coppiced woodland situated mainly on clayey soils supporting a rich flora.	To the south west of Hungerford	Bowdown and Chamberhouse Woods	Includes a wide range of semi-natural habitats partly reflecting the geology plateau gravels and Bagshot Beds on the higher ground overlying London Clay, which outcrops on the lower slopes.	To the south east of Newbury	Chawridge Bourne	An area of unimproved grassland, scrub and broadleaved woodland containing species of plants local or rare in east Berkshire.	To the north of Bracknell
	Horseshoe Bend, Shirehampton	Comprises a wooded river cliff and supports the largest known English population of the nationally rare true service-tree *Sorbus domestica* . Other trees found on site include the nationally rare whitebeams *S. eminens* and *S. anglica* and the nationally scarce large-leaved lime *Tilia platyphyllos*.	In the centre of Bristol	Chilton Foliat Meadows	An extensive system of wet neutral meadows, watercourses, tall fen vegetation and scrub.	To the north west of Hungerford	Boxford Chalk Pit	Boxford Chalk Pit shows a unique late Coniacian to Santonian succession of tilted beds overlain by a chalk mélange.	To the north of Newbury	Harpsden Wood	Harpsden Wood supports a range of woodland stand types reflecting the underlying geology and has a rich flora with over 40 species associated with a long continuity of woodland cover.	To the south of Henley-on-Thames
	Inwood, Warleigh	A structurally varied and botanically rich example of southern calcareous ash-wych elm and dry ash-maple woodland.	To the east of Bath	Colerne Park and Monk's Wood -	Floristically rich, calcareous ash-wych elm woodland.	North west Corsham	Briff Lane Meadows	Largely comprises unimproved species-rich neutral to slightly acidic grassland, a nationally rare and declining habitat.	To the north of Woolhampton	Great Thrift Wood	A predominantly damp, ancient, coppiced woodland on Reading Beds and alluvium in the Thames valley near Maidenhead.	To the south of Maidenhead
	Weston Big Wood	Weston Big Wood is a fine example of mixed deciduous woodland, with a rich variety of plant species.	To the west of Bristol	Combe Down and Bathampton Down Mines	Provides hibernation sites for Greater Horseshoe bat *Rhinolophus ferrumequinum* .	To the south of Bath	Brimpton Pit	This working gravel pit is of very considerable importance to geologists because of the evidence which it provides for environmental changes during the Ice Age.	Between Newbury and Reading	Highlands Farm Pit	Last available exposure of the gravel flooring the abandoned channel of the Thames between Caversham and Henley (the 'Ancient Channel'), which existed in this area during the Ice Ages, although its relationship to the Thames Terrace sequence is uncertain.	To the south west of Henley-on-Thames
	Walton Common	A variety of nationally scarce unimproved calcareous grassland communities are found on Walton Common.	To the west of Bristol	Corsham Railway Cutting	This locality exposes a section through the Bath Oolite and Upper Rags/Forest Marble.	In south Corsham	Cleeve Hill	A west facing chalk downland slope dominated by upright brome grass *Zerna erecta* with a mixture of other grasses, notably wood brome *Brachypodium sylvaticum* . The grassland supports a characteristic rich flora including clustered bell flower *Campanula glomerata* , carline thistle *Carlina vulgaris* , common spotted orchid *Dactylorhiza fuchsii* , rock rose *Helianthemum chamaecistus* , fairy flax *Linum catharticum* , bird's-foot trefoil *Lotus corniculatus* .	To the north west of Newbury	Lambridge Wood	The site is an interesting example of a Chiltern beechwood containing a variety of soil types from calcareous to very acid. Among a range of distinctive plant communities formed on these soils there are several rare and uncommon species.	To the north east of Henley-on-Thames
	Winsley Mines	Imporant hibernation site for greater horseshoe bats *Rhinolophus ferrumequinum*.	To the west of Bradford on Avon	Dank's Down and Truckle Hill	Botanically rich oolitic limestone grassland on which are well established several plant and animal species classified as nationally scarce in Britain.	South of south of Castle Combe	Cold Ash Quarry	This locality is unique in Britain for the assemblage of fossil plants and insects which occur in a lens of silt and clay within the Reading Beds.	To the north west of Newbury	Homefield Wood	Most of the site occupies a south facing slope supporting a range of young plantations with abundant scrub, within which are rides and glades where herb-rich chalk grassland of exceptional variety and interest occurs. The site is also notable for its invertebrate and bird life.	To the north of Henley-on-Thames
	Congrove Field and The Tumps	Situated in the southern Cotswold, Congrove Field and the Tumps support herb-rich calcareous grassland which has a restricted distribution both nationally and within Avon.	To the south east of Bristol	Freeman's Marsh	An area of unimproved meadows, marsh, willow carr, scrub, reedbed, woodland and open water which supports rich plant and animal communities.	In Hungerford	Coombe Wood	This site consists of an ancient woodland (earliest records date from 1640). There is a diverse flora, including many species normally confined to ancient woodland, which varies with differences in soils and with the range of woodland stand types represented.	To the south west of Pangbourne	Langham Pond	Langham Pond and its surrounding alluvial meadows lie on the Thames flood plain and represent a habitat of a type and quality unknown elsewhere in Southern England.	To the south east of Windsor
	North Road Quarry	The site contains an exposure of Oolite, which at this point is cambered towards Smallcombe Vale, a tributary of the Avon Valley.	In the centre of Bath	Fyfield Down	This site is notified for both its geomorphological and biological interest. Supports nationally important lichen flora.	To the west of Malborough	Decoy Pit - Pools & Woods	Comprises a mosaic of habitats including woodland, heathland, grassland and small waterbodies. With the presence of other nationally uncommon species of insect and bird.	To the south West of Woolhamton	Temple Island Meadows	Temple Island Meadows consist of a series of slightly improved, sheep grazed, wet meadows and other wetland habitats.	To the north of Henley-on-Thames
	Portishead Pier to Black Nore	Comprises geological interest which provides insight in to the paleogeography of the Carboniferous Period.	To the west of Bristol	Hampton Rocks Cutting	A Pleistocene-aged rock section exposed at this site is made up of coarse fluvial gravels showing scour-and-fill structures and planar bedding.	To the east of Bath	Easton Farm Meadow	A small meadow with unimproved, herb-rich neutral grassland, a habitat now rare and rapidly declining in Berkshire.	To the North West of Newbury	Stoke Common	An area of wet and dry heath on glacial gravels over London Clay.	To the north of Slough
	Midford Valley Woods	Midford Valley Woods comprises some of the best examples of southern calcareous ash-wych elm woods on the oolitic limestone of the Wiltshire Cotswolds. It is a floristically rich site with large populations of a plant which has a nationally restricted distribution.	To the south of Bath	Honeybrook Farm	Comprises a series of unimproved neutral to calcareous hay meadows, unimproved lime-stone grassland, ancient semi-natural woodland, a small lake and an undisturbed meandering stretch of river.	To the north west of Corsham	Enborne Copse	Consists of a semi-natural broad leaved woodland characterised by the abundance of small-leaved lime, a tree species which in Britain is confined to ancient woodlands, and is very rare in Berkshire.	To the South West of Newbury	Rodbed Wood	An area of Thames-side willow and alder woodland fed by a ditch draining water from adjacent water meadows. The diverse herbaceous flora, associated particularly with the wetter and more open parts of the wood, includes a large population of the nationally rare summer snowflake *Leucojum aestivum.*	To the east of Henley-on-Thames
	Hartcliff Rocks Quarry	Hartcliff Rocks Quarry provides excellent exposures of Triassic Dolomitic Conglomerate unconformably overlying Carboniferous Limestone.	To the south of Bristol	Jones's Mill	An area of fen vegetation, scrub and woodland lying along the headwaters of the Salisbury Avon north east of Pewsey. It represents the best known example of a calcareous valley mire in Wiltshire.	To the south of Malbrorough	Greenham and Crookham Commons	This site comprises an extensive complex of heathland, grassland, gorse scrub, broad leaved woodland and alder-lined gullies.	Between Newbury and Woolhampton, to the south	Littleworth Common	The site is an area of formerly open heathland, which has developed through natural succession into birch-oak woodland. Where enough light can still penetrate the canopy remnants of the acid heathland still persist. Elsewhere, wet flushes and ponds support communities which are both rare and declining in lowland Britain including the nationally rare starfruit *Damasonium alisma.*	To the north of Slough
	Hinton Charterhouse Field	Hinton Charterhouse Field supports a nationally rare plant protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended).	To the south of Bath	Kellaways - West Tytherton - River Avon	The locality includes a number of highly-fossiliferous exposures of the famous Kellaways Rock, a calcareous sandstone yielding abundant well-preserved bivalves, gastropods, brachiopods, belemnites and ammonites.	To the north west of Chippenham	Ham Hill	A small but remarkable area of chalk grassland supporting a diverse assemblage of plants and a wide variety of associated butterflies.	To the south west of Highclere	South Lodge Pit	South Lodge Pit exposes part of the only known British example of a late Santonian-early Campanian chalk phosphorite (calcium phosphate) deposit.	To the east of Maidenhead
	Ham Green	The cutting shows a section through Pleistocene sediments, which include two to three metres of red-brown, gritty, stony silts, with abundant Greensand chert and other far-travelled rock-types.	To the south of Bristol	Kennet and Lambourn Floodplain	The catchment of the River Kennet forms a major stronghold in England for the nationally rare and declining Desmoulin's whorl snail *Vertigo moulinsiana* .	In Hungerford	Hamstead Marshall Pit	This pit is the best available exposure of the Hamstead Marshall Terrace of the Kennet, formerly known as the Silchester Stage.	To the north of Highclere	Lodge Wood & Sandford Mill	This site consists of two small wet woodlands bordering the River Loddon, notable for large populations of the rare Loddon Lily *Leucojum aestivum* .	To the east of Reading
	Dundry Main Road South Quarry	Cited in the last century by d'Orbigny as the English type section for the Inferior Oolite, Dundry has long been a famous palaeontological and stratigraphic locality.	To the south of Bristol	King's Play Hill	Kings Play Hill is a botanically rich example of upright brome *Bromus erectu* s dominated chalk grassland and supports both locally and nationally rare species.	To the south of Calne	Hartslock	Comprises a mixture of habitats including an area of species-rich chalk downland and one of the few examples of ancient yew wood in the Chilterns, as well as semi-natural broadleaved woodland, chalk scrub and riverine fen.	To the north of Pangbourne	Bray Meadows	This is a series of species-rich, agriculturally unimproved meadows adjacent to a side channel of the River Thames near Maidenhead. The meadows support a very uncommon type of grassland with a distinctive flora which is particularly characteristic of the alcareous alluvium of the lower Thames floodplain.	To the south east of Maidenhead

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Environmental Designations	Area 1			Area 2			Area 3			Area 4		
SSSI	Quarry Steps - Durdham Down	Quarry Steps shows a fissure deposit which is in effect the last remnant of an extensively quarried area (Durdham Down) where the first reptile-bearing fissure deposits were discovered early in the 19th Century.	In the centre of Bristol	Little Grubbins Meadow	One of the best herb-rich limestone grasslands in Wiltshire	To the west of Castle Combe	Inkpen and Walbury Hills	Inkpen and Walbury Hills comprise the largest area of unimproved chalk downland in Berkshire, traditionally managed by grazing. The site also contains some of the best examples of ancient ash-wych elm woods in the county.	To the north west of Highclere	Burnham Beeches	An extensive area of the Burnham Plateau where Thames gravels and underlying Reading Beds give rise to acid soils supporting mature and developing woodland, old coppice, scrub and heath. There are ancient oak and beech pollards of which the latter are a elebrated feature of international renown.	To the north of Slough
	Barns Batch Spinney	This site is important because of the exposures which it provides of the lower part of the classic Inferior Oolite limestone sequence of the Dundry area.	To the south of Bristol	Monkswood Valley	This site comprises a woodland and grassland complex with associated mature hedges, scrub and flushes situated on sloping land to the north and south of the Monkswood Reservoir and river.	To the north of Bath	Inkpen Common	A small area of damp heathland, a remnant of the former Inkpen Great Common, which supports an interesting flora, including several species which are local or rare in Berkshire.	To the north west of Highclere	Fern House Gravel Pit	This pit shows a thick sequence of Pleistocene deposits: over five metres of Taplow Terrace gravels are overlain by one metre of loam and two metres of soliflucted gravel.	To the north of Maidenhead
	Gripwood Quarry	This site shows the junction between the Bradford Clay and the underlying limestones of the Great Oolite, both of Bathonian age.	In Bradford on Avon	Morgan's Hill	Botanically rich area of southern chalk grassland occurring in North Wiltshire. It supports a diverse flora including several uncommon species, and an associated rich butterfly fauna.	To the south of Calne	Inkpen Crocus Fields	An area of species-rich unimproved neutral grassland supporting several notable plant species.	To the north west of Highclere	Bisham Woods	An extensive area of predominantly broad leaved woodland situated on a steep north-west facing slope overlooking the River Thames at Marlow.	To the north of Maidenhead
	Stidham Farm	This site contains Pleistocene terrace-gravels of the River Avon.	To the south west of Bristol	Out Woods	Ancient ash-maple woodland on limestone, containing rare species in the ground flora.	To the south west of Castle Combe	Irish Hill Copse	An ancient coppiced woodland occupying the top and slopes of a hill on Tertiary deposits overlying the Upper chalk.	To the west of Newbury	Hollowhill and Pullingshill Woods	A woodland site in the mid-Chilterns where contrasts between the acid gravelly soils of the plateau and both shallow and deeper chalky soils of the slopes are reflected in the presence of different types of beechwood.	To the north west of Maidenhead
	Iford Manor	Iford Manor consists of a large country house and gardens situated on the Avon/Wiltshire border alongside the River Frome and surrounded by water meadow, permanent pasture and hedgerows leading up into nearby woodland. The roof voids of the Iford Manor barn and Iford Manor mill are used as a summer maternity roost by a colony of greater horseshoe bats *Rhinolophus ferrumequinum* .	South West of Bradford on Avon	Pewsey Downs	Orchid rich grassland .	To the south of Avebury	Kennet Valley Alderwoods	These woodlands are the largest remaining fragments of damp, ash-alder woodland in the Kennet floodplain.	To the west of Newbury	Kingcup Meadows and Oldhouse Wood	Kingcup Meadows and Oldhouse Wood constitutes an intimate mosaic of habitats adjacent to the River Alderbourne, which includes woodland, unimproved pastures and semi and unimproved meadowland. The fields are comprised of dry grassland, wet grassland and areas of fen and swampy vegetation.	To the north east of Slough
	Nightingale Valley	Pleistocene 'plateau-deposits' here cap the high ground at the edge of the Vale of Gordano. The deposits are very variable and include 'cannon-shot' gravels, fine sandy gravels and silty gravels.	To the west of Bristol	Piggledene	The site is noted for the important lichen flora found upon the sarsens.	To the west of Avebury	King's Copse	An old coppiced woodland, predominantly on London Clay, but partly on Bagshot Beds and Reading Beds	To the north west of Woolhamton	Staines Moor	Staines Moor represents the largest area of alluvial meadows in Surrey and supports a rich flora while the reservoirs hold nationally important populations of wintering wildfowl. A pond at the site carries an aquatic flora which is of national importance; this flora includes one plant which is extremely rare in Britain.	To the south east of Windsor
	Pen Park Hole	Pen Park Hole is a large cave system within a buried Carboniferous limestone ridge in Southmead on the northern edge of Bristol. It also supports nationally imporant invertebrates.	In north Bristol	Rack Hill	Lightly grazed Jurassic Limestone sward with a mosaic of grassland scrub transitions supporting a diverse butterfly population.	To the south of Castle Comb	Old Copse	A species-rich coppice-with-standards woodland on London Clay situated on the north side of the Kennet Valley.	In between Newbury and Reading	Windsor Forest and Great Park	Windsor Forest and Great Park farms part of the largest continuous tract of woodland and parkland in Berkshire. The site provides habitat for a range of rare species of invertebrate which include the internationally important violet click beetle *Limoniscus wolaceus* and stag beetle *Lucanus cervus* and a rich assemblage of other Red Data book beetles and flies.	To the south of Windsor
	Avon Gorge	Supports nationally rare plants and includes Leigh Woods	In west Bristol	River Kennet	The River Kennet has a catchment dominated by chalk with the majority of the river bed being lined by gravels.	Runs through Newbury, Malbrough	Pamber Forest and Silchester Common	The site consists of an extensive ancient oakwood, Pamber Forest; two heathland Commons and a series of unimproved wet meadows. This association of ancient woodland, heath and grassland supports a diverse range of plants and animals, including many nationally rare species of bird listed in Annex 1 of the EC Directive on the Conservation of Wild Birds.	To the North of Woolhampton	Wraysbury & Hythe End Gravel Pits	Wraysbury and Hythe End Gravel Pits comprise a mosaic of open water, islands, grassland, scrub and woodland within an area of former gravel extraction. The site supports nationally important numbers of three species of wintering wildfowl together with an important assemblage of breeding birds associated with open waters and wetland habitats. In addition the site supports two nationally scarce invertebrates and a number of locally uncommon plants.	To the south east of Windsor
	Weston-in-gordano	Temporary exposures here have shown Pleistocene sediments, including interglacial fluvial sands and marine gravels and cold-stage fluvial gravels. Rich molluscan faunas have been reported from the section.	To the west of Bristol	Roundway Down and Covert	An extensive tract of chalk downland which supports a rich unimproved grassland flora with smaller areas of mixed scrub.	To the south of Calne	Pincent's Kiln	This disused quarry provides the best and only remaining permanent exposure of the Tertiary Reading Beds in the area.	To the west of Reading	Wraysbury No 1 Gravel Pit	Shoveler *Anas clypeata* goldeneye *Bucephala clangula* and smew *Mergus albellus* are regular winter visitors in small but significant numbers.	To the south east of Windsor
	Newton St. Loe	This site consists of a river terrace approximately 10m above the present River Avon. The Pleistocene fluvial gravels temporarily exposed at Newton St Loe exhibit scour-and-fill structures. The trough cross bedding is consistent with the gravels having been laid down by a braided river, a fluvial style usually associated with cold stage sedimentation.	In north west Bath	Savernake Forest	Savernake Forest is an extensive area of ancient woodland with over one thousand years of documented history. One of the largest woods in Wiltshire, it harbours an outstanding lichen flora and a wide variety of other plants, including species with nationally restricted distributions and rich invertebrate fauna.	Just south of Malbourough	Redhill Wood	onsists predominantly of ancient woodland exhibiting a wide range of stand types and with particularly fineexamples of birch-ash-lime, pedunculate oak-ash-hazel and valley-alder woodland. Diverse flora present within the clearings and glades.	To the north of Highclere	Wraysbury Reservoir	Wraysbury reservoir regularly supports nationally important numbers of wintering cormorant *Phalacrocorax carbo* , great crested grebe Podiceps cristatus and shoveler *Anas clypeata* .	To the south east of Windsor
				Silbury Hill	An area of botanically rich chalk grassland on steep slopes exhibiting the full range of aspects	To the south of Avebury	River Lambourn	The River Lambourn is a classic example of a lowland chalk river.	Flows through Newbury			
				Spye Park	Extensive habitat mosaic comprising large expanses of some of the finest undisturbed alderwoods in the county, along with oakwoods, parkland and an area of dry acidic grassland containing several locally uncommon plants.	To the west of Laycock	Ron Ward's Meadow with Tadley Pastures	The main meadow comprises an unimproved, herb-rich grassland, managed traditionally as a hay meadow with aftermath cattle grazing: adjacent meadows have been included within the boundary, as they support grasslands managed by grazing alone and are thus markedly different in terms of species composition. There are 28 species indicative of ancient grassland present, of which a number are regionally uncommon, making it one of the finest surviving hay meadow/pasture complexes in Hampshire.	To the south east of Newbury			
				St. Catherine's Valley	The site comprises a steep sided valley system comprising unimproved calcareous grassland and neutral hay meadows.	To the north of Bath	Snelsmore Common	The site consists of a variety of woodland and heathland habitats comprising dry heath, wet heath, valley mire (bog), birch woodland and ancient semi-natural broadleaved woodland. These support specialised communities of plants and animals, including many species, local or rare in Berkshire.	To the north of Newbury			
				Stanton St. Quintin Quarry & Motorway Cutting	Provides one of the country's few complete exposures of the Cornbrash.	To the north of Chippenham	Sulham and Tidmarsh Woods and Meadow	Wet woodland and seasonally flooded meadow communities.	To the west of Reading			

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Environmental Designations	Area 1			Area 2			Area 3			Area 4		
SSSI				Sutton Lane Meadows	Is a botanically diverse area of unimproved neutral grassland in the Oxford Clay Vale of North Wiltshire. The site comprises two extremely herb-rich meadows which are cut for hay in late summer and then grazed in autumn	To the north of Chippenham	Thatcham Reed Beds	Thatcham Reed Beds is important nationally for its extensive reedbed, species rich alder woodland and fen habitats. The latter supports Desmoulin's whorl snail, which is of national and European importance. A large assemblage of breeding birds including nationally rare species such as Cetti's warbler is also associated with the reedbed, fen and open water habitats found at Thatcham Reed Beds.	To the west of Newbury			
				West Yatton Down	The site is an outstanding example of a lightly grazed and agriculturally unimproved limestone grassland.	To the south of Castle Combe	Wasing Wood Ponds	A group of ponds, wet ditches and marshy areas partly in Wasing Wood and partly on open ground formerly excavated for gravel. The ponds vary in depth, substrate, water-chemistry, shade and marginal vegetation and provide an important range of habitats for aquatic insects.	To the south east of Newbury			
							West Woodhay Down	A small relict area of unimproved chalk grassland on the Upper Chalk of the Berkshire Downs, on the Hampshire border. Supports a diverse range of flora species.	To the west of Highclere			
							Westfield Farm Chalk Bank	A chalk grassland bank on the north facing scarp of the Berkshire Downs.	To the north west of Newbury			
							West's Meadow, Aldermaston	West's Meadow comprises two small fields of unimproved pasture bounded by hedgerows and a small stream. The meadows consist of neutral to acidic herb-rich grassland including both well-drained areas and wetter areas of base-poor marsh.	To the south west of Newbury			
							Winterbourne Chalk Pit	The rocks seen here contain a series of phosphate-rich chalks and other features which indicate the rather abnormal pattern of sedimentation which characterised the deposition of the upper parts of the Chalk in West Berkshire.	To the north of Newbury			
							Woolhampton Reed Bed	This site, which consists of dense reed bed with smaller areas of tall fen vegetation and carr woodland, is notable for its nesting passerine bird populations and for the diversity of insects it supports, which include several uncommon species.	Woolhamptom			
National Nature Reserve	Gordano Valley	A wide range of fauna and flora has been recorded including long eared owls, brown hare and more than 130 species of flowering plants.	To the west of Bristol	Fyfield Down	This site is notified for both its geomorphological and biological interest. Supports nationally important lichen flora.	West Malborough	Ashford Hill	Lowland Grassland	South west of Newbury	N/A		
	Leigh Woods	Mix of ancient woodland and flower rich limestone grassland.	In north west Bristol	Pewsey Downs	Orchid rich grassland.	West of Avebury						
Local Nature Reserves	Avon Valley Woodland	The maturing broadleaved woodlands are home to a variety of wildlife.	In north west Bristol	Barbury Castle	Chalk downland particullary notable for butterfly species such as marsh fritillary.	North of Marlborough	Ali's Pond	18 species of dragonfly and over 40 species of aquatic/wetland plants have been recorded at the site since its establishment in 1997.	North east of Reading	Arthur Jacob Nature Reserve	Created from a series of derelict sewage sludge lagoons, that are being transformed into important wetland habitats.	To the west of Slough
	Camerton Batch	Former coal mining batch. Coppiced woodland and conifers.	In west Bath	Drews Pond Wood	Habitats include woodland, meadows and a burial ground. There are 29 Aincient Woodland indicator species on site, including field rose, wood sorrel, Solomon's seal etc. Also bird and mammal species, such as bats (four species), badgers, buzzards and long-eared owls.	South of Devizes	Blundells	Ancient woodland with a stream.	West of Reading	Alder Moors	Ancient woodland.	To the west of Reading
	Carrs Woodland	Carrs Wood is a beautiful area of broadleaved woodland, limestone pasture and a brook.	In west Bath	Green Lane Wood	Ancient woodland including plamts such as Solomon's Seal, Stinking Iris and a host of orchids. Grass snake and slow worm, butterflies, such as Silverwashed Fritillary and Duke of Burgundy.	East of Trowbridge	Clayfield Copse	Ancient woodland.	North of Reading	Bisham Woods	Mixed plantation and coniferous woodland.	To the north of Maidenhead
	Eastwood and Battery Point	Ancient woodland and semi-ancient woodland.	In west of Bristol	Mortimore's Wood	Selection of habitats including woodland and river bank.	South of Chippenham	Herbert Plantation	Mixed woodland.	South Newbury	Black Park	Mixed woodland and grassland providing habitats for bats, woodland birds and invertebrates.	To the north east of Slough
	Kensington Meadows	Mosaic of habitats supporting a diverse number of species.	North east part of Bath	Oakfrith Wood	Ancient woodland site replanted in 1930's following WWI felling. Bluebells in spring.	South east of Devizes	Highwood	Plantation woodland.	East of Reading	Braywick Park	The site of a disused quarry, it has formal parkland with trees to wildlife habitats including grassland, woodland and pond .	In Maidenhead
	Lawrence Western Moor	An extensive network of wet meadows and reedbeds.	In north west Bristol				Lousehill Copse	Semi-ancient woodland.	West Reading	Bradnam Wood	Comprises multiple woodlands.	To the north of Maidenhead
	Manor Road Community Woodland	Young native woodland, hedgerows, stonewalls and a large area of grassland.	In south west of Bristol				Maiden Erlegh Park	Habitats include lowland mixed deciduous woodland, ancient semi natural woodland.	South west Reading	Carpenter's Wood, Dungrove Hill	Comprises multiple woodlands.	To the north of Maidenhead
	Middle Hill Common	Comprises 4 acres of limestone grassland rich in wild flowers, broad-leaved woodland, scrub and limsstone grassland and wildflower meadow.	To the west of Bristol				Hosehill Lake	A lake with footpath .	South of Theale	Cocksherd Wood	A bluebell woodland.	In Slough
	Royate Hill	Habitats on the site range from limestone flora on the embankment top, to flower rich grassland, developing woodland and scrub on the embankment sides.	In the centre of Bristol				Round Copse	Dense Woodland.	West Reading	Haymill Valley	The site has an old mill pond which has silted over and become a reedbed. White letter hairstreak butterfly has been recorded on site.	In Slough

Great West Way Environmental Considerations and Opportunities

Environmental Designations	Area 1			Area 2			Area 3			Area 4		
Local Nature Reserves	St George's Flower Bank	Runs along part of the A369 and supports a diverse flora.	To the west of Bristol				Pearman's Copse	Area of ancient woodland.	South Reading	Lavells Lake (Dinton Pastures)	Comprisesa rich and varied bird population and is nationally known for migratory and resident species. There is a varied selection of waterfowl, dragonfly and amphibian ponds, water scrapes, tern islands and meadows.	To the east of Reading
	Stockwood Open Space	Most of the reserve is old grassland and unploughed meadows on lime-rich clay soils.	In the centre of Bristol				McIlroy Park	Natural Park.	West Reading	Holt Copse & Joel Park	Habitats include lowland mixed deciduous woodland. Ancient semi-natural woodland and a large noctule bat roost.	In Wokingham
	Trooper Hill	It is a unique area of acid grassland and heathland, providing a habitat and food source for many species of wildlife.	In the centre of Bristol				Thatcham Reedbeds	Wetland habitats include reedbeds, species rich fen, wet woodlands, standing and running water.	West of Newbury	Ockwells Park	Paths and nature trail around the park allow you to explore the areas of woodland, meadow and copses.	To the south of Maidenhead
	Twerton Roundhill	Its grassy open slopes boast some of the best limestone grassland in the city.	In the west of Bath				Padworth Common	Made up of wet, dry and humid lowland heath, oak and pine woodlands, a permanent pond, several seasonal ponds and a wet alder woodland forming part of Padworth Gully.	South west Reading	Warren Nature Reserve	Flowing along the side of the reserve, the river Wye provides the perfect habitat for many British water birds.	To the north of Maidenhead
	Wick Golden Valley	There are some old trees, including species that indicate ancient woodland.	In south west of Bristol				Pamber Forest	Ancient woodland.	Tadley	Herschel Park	Supports a wide variey of faune species.	In Slough
	Willsbridge Valley	The valley contains many habitats including woodland and streams.	In west Bristol									
World Heritage Sites	**City of Bath**	The city is of outstanding universal value for a number of cultural attributes, including the Roman remains (especially the Temple of Sulis Minerva and the baths complex); the Georgian city; the Neo-classical style of the public buildings (including the Assembly Hall and the Pump Rooms); and the individual Georgian buildings.		**Stonehenge, Avebury and Associated Sites**	These are among the most famous groups of megaliths in the world. The two sanctuaries consist of circles of menhirs arranged in a pattern whose astronomical significance is still being explored. About a third of the property at both Stonehenge and Avebury is owned and managed by conservation bodies: English Heritage, the National Trust and the RSPB. Much of the property can be accessed through public rights of way as well as permissive paths and open access provided by some agri-environment schemes. Managed open access is provided at Solstice.		N/A			**Royal Botanical Gardens -Kew**	This historic landscape garden features elements that illustrate significant periods of the art of gardens from the 18th to the 20th centuries, including work by internationally renowned landscape architects Bridgeman, Kent, Chambers, Capability Brown and Nesfield. The gardens house botanic collections (conserved plants, living plants and documents) that have been considerably enriched through the centuries. Since their creation in 1759, the gardens have made a significant and uninterrupted contribution to the study of plant diversity and economic botany.	
Conservation Areas	Bristol	Has 33 conservation areas, including City & Queen Square, City Docks, Clifton & Hotwells, College Green, Park Street & Brandon Hill, Redcliffe.		Wiltshire	Conservation areas in Chippenham, Corsham, Box, Calne, Lacock, Avebury, Marlborough and many surrounding settlements in route corridor.		West Berkshire	Conservation Areas in Newbury Town Centre, Kintbury, Hungerford, Thatcham, Aldermaston and many surrounding settlements in route corridor.		Reading	15 conservation areas in Reading the majority of which are located in and around Reading Town Centre.	
	South Gloucs	Conservation areas within the route corridor include Acton Turnville, Bitton,Chipping Sodbury, Dyrham, Frenchay and Pucklechurch.								Windsor & Maidenhead	27 conservation areas in the borough including Maidenhead Town Centre, Maidenhead Riverside, Cookham High Street, Cookham Deane, Eton, and Windsor.	
	Bath	Consevation areas within the route corridor include City of Bath, Keynsham, Kelston, Saltford, Newton St Loe, Bathford, Batheaston, Claverton, Freshford.								Wokingham	Conservation areas in route corridor include Wokingham Town Centre and Langborough Road Conservation Area and other smaller areas throughout the borough.	
										South Oxfordshire	Conservation areas in route corridor include Henley on Thames Main Area, Henley Reading Road, Henley St. Marks Road and other smaller settlements.	
Scheduled Monuments / Parks and Gardens / Battlefields / Key Listed Buildings	Numerous scheduled monuments, parks and gardens and listed buildings. Include Ashton Court (LB and Grade II Park and Garden) in Bristol, Blaise Castle (SM , LB and Grade II Park and Garden) in Bristol, Tyntesfield Grade II Park and Garden to south west of Bristol, Dyrham Park (Grade 1 Listed and Registered Park and Garden) Roman Baths (SM) in Bath. Newton Park Grade II Park and Garden to west of Bath. One battlefield - Battle of Lansdown Hill 1643.			Numerous scheduled monuments, parks and gardens and listed buildings. Includes Malmesbury Abbey (SM); Avebury Henge (SM); and Liddington Castle (Listed) south of Swindon. Tottenham House and Savernake Forest Grade II Park and Garden south east of Marlborough. Bowood Grade1 Park and Garden south west of Calne. One battlefield - Battle of Roundway Down 1643.			Numerous scheduled monuments, parks and gardens and listed buildings. Includes Littlecote Roman Villa - near Hungerford (SM), Donnington Castle - Donnington, West Berkshire (Grade II & SM); Ashdown House (Grade I LB) north west of Newbury. Highclere Park (Grade 1 Park and Garden). One battlefield - Battle of Newbury 1643.			Numerous scheduled monuments, parks and gardens and listed buildings. Includes Windsor Castle - Windsor (SM & Grade I LB), Greys Court (Grade II SM) - north of Reading, Royal Botanical Gardens - Kew (SM). The Royal Estate, Windsor and Clivedon Estate near Maidenhead (both Grade I Park and Gardens).		
AQMAs	Bristol AQMA	An area covering the city centre and parts of the main radial roads including the M32. The pollutants and their objectives are as follows nitrogen dioxide (one hour and annual mean) and particulate matter (24 hour mean and annual mean).		Wiltshire AQMAs	9 AQMAs. Calne AQMA (x2) - main road of Calne and border between Calne and Malborough measures nitrogen dioxide annual mean. Malborough AQMA located around the border of Malborough - nitrogen dioxide annual mean. Devizes Shanes Caske AQMA located at junction of the A342 and A361 - nitrogen dioxide annual mean. Salisbury AQMA (x3) covers city centre, Wilton Road A36, London Road- nitrogen dioxide annual mean; Westbury AQMA covers main street in Westbury - nitrogen dioxide annual mean and particulate matter 24 hour mean. Bradford-on-Avon AQMA covers the main roads in BoA and measures nitrogen dioxide annual mean and particulate matter anual mean.		West Berkshire AQMA	West Berkshire Thatcham AQMA, a section of the A4 in Thatcham. Measures nitrogen dioxide annual mean.		Reading AQMA	Reading AQMA - covers most of the principal road network in central Reading for both annual average nitrogen dioxide.	
	South Gloucestershire AQMAs	4 AQMAs are present. Kingswood - Warmley (focus annual mean of nitrogen dioxide), concentrates on roads linking South Gloucestershire / Bristol City; Staple Hill (focus annual mean of nitrogen dioxide), covers Staple Hill crosswords; Cribbs Causeway (focus annual mean of nitrogen dioxide), covers M5 Junction 17; and M4, M5, M32 M49 Motorway Corridors (focus annual mean of nitrogen dioxide).								South Oxfordshire AQMAs	Henley AQMA, main road in Henley, measures nitrogen dioxide annual mean.	
	Bath AQMA	Covers most of the principal road network in central Bath for both annual average and hourly objectives of nitrogen dioxide.								Wokingham AQMAs	Twford Crossroad AQMA, measures nitrogen dioxide annual mean.	
										Bracknell Forest AQMAs	Bracknell Road B3348 and Crowthorne High Street, Crowthorne AQMA measures nitrogen dioxide annual mean.	
										Royal Borough of Windor and Maidenhead AQMAs	Wraysbury/M25 AQMA - Junction 13 of the M25; Imperial/St Leonards Road Junction AQMA - links Clarence Road roundabout with Windsor town centre; Windor AQMA - covers Windsor town centre; Maidenhead AQMA - Maidenhead Town Centre; Bray AQMA - M4 crosses over the A308 London Road. All AQMAs measures nitrogen dioxide annual mean.	
Flood Risk Areas	Flood zone to either side of River Avon which flows through Bath / Batheaston/ Bradford-on Avon.			Flood zone to either size of the River Marden which flows from Chippenham and Calne. Flood zone to either size of the River Avon which flows through Chippenham and Lacock. Flood zone to either size of the River Kennet which flows through Avebury and Malborough.			Flood zone to either side of River Kennet which flows through Malborough, Newbury to Reading.			Flood zone to either side of River Thames which flows thhrough Reading to London.		

Transport Routes	Area 1	Area 2	Area 3	Area 4
Strategic Routes	Railway linking Bristol to London via Bath, Chippenham, Swindon, Didcot Parkway and Reading.	Railway linking Bristol to London via Bath, Chippenham, Swindon, Didcot Parkway and Reading.	Railway linking Bristol to London via Bath, Chippenham, Swindon, Didcot Parkway and Reading.	Railway linking Bristol to London via Bath, Chippenham, Swindon, Didcot Parkway and Reading.
	M4 , A4 - links Bristol to London.	M4, A4 - links Bristol to London.	M4, A4 - links Bristol to London.	M4, A4 - links Bristol to London.
Waterways	River Avon - Runs Bristol to Bradford-on-Avon	Wilts and Berks Canal - Runs Trowbridge to Abingdon; Kennet and Avon Canal - runs from Bradford-on-Avon to Reading; River Thames - from Lechlade (north of Swindon) to London.	Kennet and Avon Canal - runs from Bradford-on-Avon to Reading.	River Thames - Reading to London.
Cycle Routes e.g. Sustrans	Along the southern boundary of the GWW Corridor the Sustrans Route 4 runs from Bristol to London.	Along the southern boundary of the GWW Corridor the Sustrans Route 4 runs from Bristol to London.	Along the southern boundary of the GWW Corridor the Sustrans Route 4 runs from Bristol to London.	Along the southern boundary of the GWW Corridor the Sustrans Route 4 runs from Bristol to London.
Waymarked attractions	Cotswolds Way - Bath to Chipping Campden; Thames Path - Cirencester to London.	Thames Path - Cirencester to London; Ridgeway National Trail - Malborough to Luton via Reading.	Thames Path - Cirencester to London; Ridgeway National Trail - Malborough to Luton via Reading.	Thames Path - Cirencester to London.

Appendix C - Compatability Review Matrix

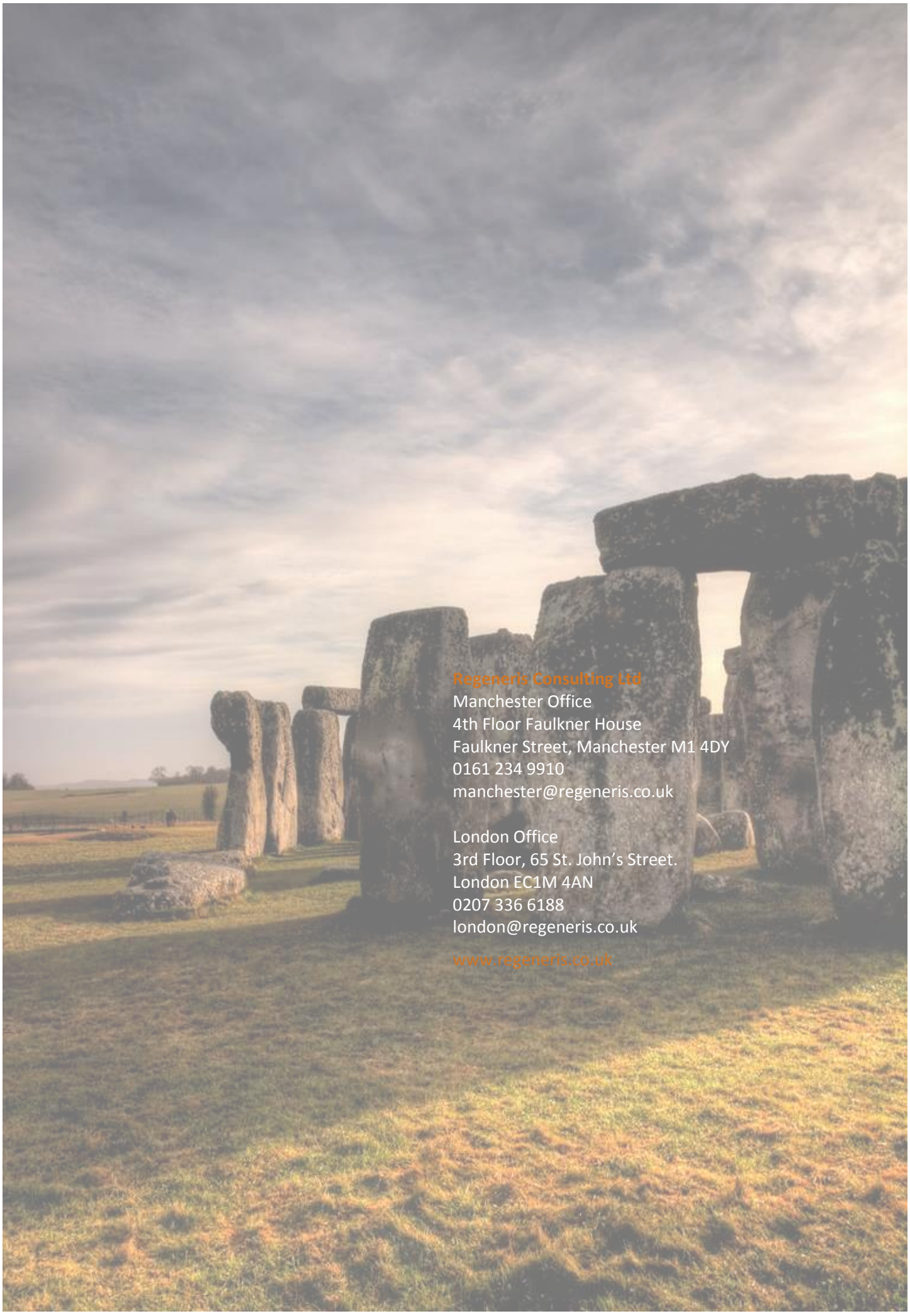
Compatibility Review of Great West Way and SEA Objectives

GWW Objectives	SEA Topics / Objectives						Commentary / Recommendations
	Biodiversity, Flora and Fauna	Population and Human Health	Water and Soil	Air	Climate Factors	Cultural Heritage and Landscape	
1. Generate short-medium- and long-term additional tourism visits and spend, increase dwell time and achieve high satisfaction along and around all parts of the route.	?/-	?/+	0	-	-	?/-	The GWW has the potential to increase appreciation of nature. However, the increased visitor numbers could have adverse effects on designated ecological sites and protected species. The extent of infrastructure provision and associated developments needs to be considered further, along with cumulative impacts. GWW Project could give rise to greater access to nature and well-being outcomes, including promoting active lifestyles, linked to cycling and walking. Need to ensure that economic benefits are delivered to the local communities and that education and employment opportunities are delivered to the local populations. Increased traffic generation could increase emissions to air. There is a need to prioritise public transport, cycling and walking routes / access. The GWW should increase appreciation and understanding of heritage assets and landscapes of value. However, there is also the potential for negative effects if increased visitor numbers are not properly managed. Cumulative effects on AONBs will also need to be considered carefully.
2. Improve linkages between a range of attractions and activities.	?/+	?	0	?/-	?/-	?/+	This Objective could help to direct people to less sensitive ecological areas / areas of less recreational pressure. The improved linkages would need to prioritise public transport routes where feasible to minimise increases in private car journeys and associated emissions.

GWW Objectives	SEA Topics / Objectives						Commentary / Recommendations
	Biodiversity, Flora and Fauna	Population and Human Health	Water and Soil	Air	Climate Factors	Cultural Heritage and Landscape	
3. Use smart destination technology to provide an innovative virtual signage and interpretation solution.	+	0	0	0	0	+	This could have a positive impact by reducing the need for signage and physical interventions (thereby reducing ecological, heritage and landscape effects).
4. Improve private and public transport and other visitor-related infrastructure along and around the route.	?/-	?/+	?/0	-	-	?/-	Increased traffic generation could increase emissions to air – greater emphasis should be provided on promoting more sustainable forms of transport. Improvements in public transport could also benefit local communities.
5. Direct visitors to less-visited areas by created branded itineraries and experiences along and around the route.	?/-	?/+	0	?/-	?/-	?/-	This Objective could help to direct people to less sensitive ecological and heritage areas / areas of less pressure. This should be a specific part of the Objective. The improved linkages would need to prioritise public transport routes where feasible to minimise increases to private car journeys and associated emissions.
6. Increase growth, productivity and partnership working via a programme that encourages stakeholders and businesses to work together on a single compelling proposition that brings benefits to all.	+	+	+	?	?	+	This Objective should see benefits to biodiversity, heritage assets, landscapes of value as well as local communities. This Objective could be made stronger by making specific reference to achieving positive environmental outcomes alongside economic benefits. Furthermore the objectives do not make any reference to specifically benefiting local communities and businesses.

GWW Objectives	SEA Topics / Objectives						Commentary / Recommendations
	Biodiversity, Flora and Fauna	Population and Human Health	Water and Soil	Air	Climate Factors	Cultural Heritage and Landscape	
7. Increase and improve the quality and range of product, for example attracting new accommodation in areas where supply is low.	?	?	?	?	?	?	Effects would relate to the extent of change / scope of associated development as a result of the project.
8. Work with the trade to ensure bookable product is available in target domestic and international markets.	0	0	0	0	0	0	No direct effect, however the success of this Objective would have a direct impact on visitor numbers (refer to the effects of Objective 1).
9. Be a major catalyst for change.	?	?	?	?	?	?	Effects would relate to the extent of change / scope of interventions as a result of the project.
10. Create something new and exciting to add to England's existing offer.	0	0	0	0	0	0	No direct effect, however the success of this Objective would have a direct impact on visitor numbers (refer to the effects of Objective 1).

Assessment Criteria	
+	Option would have a positive effect
?	Effect of option is uncertain
0	Option would have a neutral / no effect
-	Option would have a negative effect
Note: Assessment of some objectives may be considered to be positive or negative but with some uncertainties, in which case a symbol such as ?/+ or ?/- may be used.	



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