

# A303 Corridor Improvement Programme (including the A358 and A30)

## Outline economic case and proposed next steps

April 2013



HEART OF THE SOUTH WEST  
Local Enterprise Partnership



Wiltshire Council  
Where everybody matters

Devon  
County Council

*This campaign is supported by; Cornwall Council, Plymouth Council, Torbay Council, CBI, Cornwall & Isles of Scilly LEP, Devon and Somerset Fire & Rescue Service,*



# Foreword

*“The A303 acts as a beaver dam across the flowing river bringing people to us. We totally support the upgrading of the road as we know from experience how much the A30 improvements made a difference, we know that the A303 will have a similar if greater impact still.”*

Sir Tim Smit KBE, Chief Executive, Development and co-founder of The Eden Project.

An improvement to the A303/A358/A30 corridor has long been considered a priority by a strong coalition of businesses, LEPs, local authorities, emergency services and cross-party MPs who are calling for vital improvements to the A303 corridor to boost the South West economy and support the Government’s drive for growth.

The route experiences considerable congestion, and road safety problems, and is seen as an extremely unreliable access point to the South West. From a survey of over 650 businesses, a worrying 89% said the unreliability of the route was harming their business. This has resulted in restraints to development and business growth along the corridor.

The inherent lack of resilience in transport routes linking the South West with UK and international markets is highlighted time and time again when the limited road or rail links to the area are closed due to accidents, flooding or even routine maintenance works.

Authorities along the corridor (Somerset, Devon, and Wiltshire), the Highways Agency and Heart of South West Local Enterprise Partnership have collaborated to bring together a case for investment as summarised in this document. This strategy complements the National Infrastructure Plan and Government investments to remove barriers to growth in the South West such as funding for faster broadband connectivity, improvements to the A30 (Temple) and the South Devon Link Road.

We are seeking a commitment from Government to progress the whole route improvement over time, based on the considerable wider economic benefits and direct transport benefits it would deliver.

There is a clear case for the Highways Agency to take the scheme forward as a priority within their investment programme and deliver sections of the improvement in phases. Further detailed work will be required within forthcoming Agency Route Based Studies, but we have established that many sections of the route represent high value for money when comparing the cost of the improvements to the predicted transport and wider economic benefits.

We want the Government to agree to progress improvements to the single carriageway sections which are high value for money as early phases of the overall improvement and consider that a number of sections of the route can be delivered quickly.

There are also opportunities for Government to explore private sector delivery, operation and management as part of the national work on roads reform. There is a clear and compelling economic case for progressing the scheme.

Signed by

**Heart of South West Local Enterprise Partnership**  
**Devon County Council**  
**Somerset County Council**  
**Wiltshire Council**

## Summary

Somerset County Council and its partners including the Heart of the South West LEP, Devon County Council and Wiltshire Council in consultation with the Highways Agency have been developing an investment case to significantly improve the A303/A358/A30 road corridor between Amesbury, Taunton and Honiton.

### Economic growth

The catalyst for this work has been the national desire to consider infrastructure projects that stimulate local economic growth.

The South West economies of Wiltshire, Somerset, Dorset, Devon and Cornwall contribute proportionately less to the UK economy than other regions as measured by GVA per head. Our wages are below the average for the whole South West. South West LEAs and the CBI consider that we have a unique opportunity to contribute more to the national economy by releasing the untapped potential in the South West economy through investment in this vital piece of strategic infrastructure.

### Route importance & resilience

Together with the M3 and A30, the A303 makes up one of the main routes from London to South West England. Despite being a primary route to and from South West England and a European 'TEN-T' route, the corridor is frequently congested and viewed by businesses as highly unreliable. Congestion is frequently reported throughout the year on the route's single carriageway sections. This is undoubtedly a contributory factor to reduced business productivity levels along the route compared to areas along the M4/M5 corridor, which perform notably better in economic terms.

## Our proposal

Our proposal involves improving the route to a dual carriageway standard with early improvements to three single carriageway sections which offer good value for money as stand-alone investments. In the longer term there is a need to deliver capacity improvements to key junctions along the route. The aim being the provision of a consistent standard along the whole route.

### Key outcomes

#### The scheme will:

- Generate 21,400 jobs;
- Generate £41.6bn to the economy (GVA);
- Provide transport benefits of £1.9bn due to a reduction in journey times, congestion and delays;
- Provide good value for money when considering travel time, operating cost and safety benefits compared to scheme costs, with many sections of the scheme providing high value for money as early phases of delivery;
- Generate employment related economic impacts of £7.2bn;
- Increase visitor expenditure by £8.6bn per year;
- Improve transport resilience to cope with incidents and during flooding;
- Save an anticipated 1807 fatal or serious casualties over 60 years;
- Reduce carbon emissions by 9%

*(Parsons Brinckerhoff A303 A358 A30 Corridor Improvement Programme Economic Impact Study).*



# What we want from the Government

The information within this document demonstrates there are considerable economic benefits in improving the end to end route – this will facilitate a renaissance of the towns along the corridor, assist the economic growth of the south west and create a safer, more resilient transport network with less congestion and greater journey time reliability. We have two vital questions for Ministers:



1. Do Ministers agree that improving the A303/A358/A30 corridor over time aligns well with the Governments economic growth and carbon reduction policies? (Note that this scheme is one of the LEP's, SW Chambers and CBI's top priorities).
2. Following on from the recent budget announcement of an additional £3bn a year towards infrastructure, will Ministers now provide the DfT and Highways Agency with a mandate to progress the business case in detail as a matter of urgent priority for the following single carriageway sections as being the first deliverable in a longer-term commitment to improve the route with the support of the local authorities and LEPs?
  - **Dualling the Sparkford to Ilchester section – cost £50m**
  - **Small scale improvements between Ilminster and Honiton – cost £50m**
  - **Dualling the Chicklade Bottom to Mere section – £150m**

These sections offer good value for money and return almost 6 times the investment in terms of transport economic benefits. They could be delivered relatively quickly having been through some of the required statutory processes.

## Support

The campaign to improve the A303/A358/A30 corridor commands strong support from LEPs, the CBI, South West Chambers, local authorities, emergency services and cross-party MPs.

HEART OF THE SOUTH WEST

### Local Enterprise Partnership



#### **Tim Jones, Chairman, Heart of the South West LEP:**

The A303's importance cannot be underestimated and ensuring that traffic can flow freely along this key route is crucial to the south west's economy. Business needs confidence in the infrastructure, or it cannot grow; a resilient road network is one of our top priorities for economic growth.



**Chris Pomfret, Chairman of the Cornwall and Isles of Scilly LEP:**

“Serious and consistent under investment in infrastructure is

a major limiting factor on economic growth in the South West Peninsula. The continual concern with the North / South divide seems to ignore the fact that some of the poorest communities in the country are in the South West. We have shown that despite the infrastructure impediments we are able to grow so just think what could be the case if they were removed. The **future growth potential** of the UK will be led by SMEs and we have many of the best in the country here in the South West. We need Government to support sustained investment in our strategic transport network to realise the South West’s full potential. Government should be looking at how improvements to the A303 can act as a **catalyst for further economic growth** and **maximise the benefit** of the investments that Government already is making in the network, for example on the A30 at Temple and on the new South Devon Link Road.”



**Stephen Glaister, Director, RAC Foundation:**

“Completion of the A303 would result in **increased potential for business and residential development bringing substantial benefit to the region.** It will provide relief to the M4 and M5 alongside reductions in journey times and fuel consumption.”



**Julie Pilbeam, Agusta Westland, Yeovil:**

“The proposals as outlined would provide **enormous benefits to our business operation** in that our many logistic movements would be able to travel unhindered by the current delays so often encountered.”



**Sir Tim Smit KBE, Chief Executive, Development, and co-founder of The Eden Project:**

“The far SW of Britain is the tourism capital of Britain, despite being at the far end of the country. When the A30 was improved visitors came in increasingly larger numbers. We knew it would. **To ensure the industry’s long term future** and to thrive in the 21st Century it has to have the road connections that encourage people to feel that it is accessible. Cornwall is intensely aware that the A303 acts like a beaver dam across the flowing river bringing people to us. It may be far up river but impacts on us more than

is immediately apparent. **We totally support the upgrading of the road** as we know from experience how much the A30 improvements made a difference **we know that the A303 will have a similar if greater impact still.**”



**Philip Coward, Managing Director, The Hill Brush Company Ltd, Mere, Wiltshire:**

“We consciously decide not to travel on the A303 on a Friday especially in the afternoon, because it can involve so much wasted time. We also deter deliveries on Fridays if possible. This is **not a sensible situation for any business**, and one that should be addressed urgently. Naturally an improved A303 would bring more **business and therefore jobs** to southern Wiltshire.”



**Graham Mottram, Director, Fleet Air Arm Museum, Ilchester:**

“There is no doubt in our opinion that any improvements, essentially dualling, to the A303, ought to **bring benefits to our tourism economy** by dint of improving the perception of visitors’ from the south east that the south west is easily accessible. We all know that this is currently not the case... If that journey could be shortened and/or eased, the potential for short breaks would certainly improve, because potential visitors would not have to factor in a lengthy delay into their travel plans.”



**Lee Howell, Chief Fire Officer,  
Devon and Somerset Fire and Rescue Service:**

**“The A303 forms an essential business and tourist corridor, bringing much needed investment to local businesses and supporting economic growth in the South West. It is however inadequate for the volume of traffic using it and the nature of the road in its current state presents the fire and rescue service with some significant challenges. On average a collision occurs every 6 days on the A303. Too often, Devon & Somerset Fire and Rescue Service, along with our emergency service partners, see the life changing impacts of collisions on this road. The cost to our communities and society is immense and whilst we continue to engage road users in education with our partners to attempt to modify driver behaviours, additional factors such as road improvements will improve safety and in doing so, reduce the associated societal cost to our communities. As such, we fully support the need to improve the A303 as this will not only improve the local infrastructure and improve accessibility but at the same time, this much needed investment will also improve safety of the public.”**



**Councillor Tudor Evans, Leader,  
Plymouth City Council:**

Plymouth recognises the strategic importance of the A30 / A303 to the South West – and any measures that help bring people into the region get our support. With all authorities working closer together and with the Highways Agency and Department for Transport to secure improvements to this route, we can look forward to a stronger regional economy – not just because of visitors coming here to enjoy this stunning part of the country, but for quicker road journey times for our businesses who rely on this route to get their goods to and from the South East.



South Western Ambulance Service NHS Foundation Trust

**Wayne Darch, South Western Ambulance Service NHS Foundation Trust:**

We are happy to contribute towards the case for improving the A303 and would support the view that it is one of only two strategically important routes into the region. The A303 also provides our services across Somerset with essential links between the two County hospitals namely, Musgrove Park Hospital, Taunton and Yeovil District Hospital.



**Torbay Mayor Gordon Oliver:**

Business is all about having the right connections - and Torbay is committed to working with local partners and improving the South West's links to global markets. We fully support the business case for improving the A303; the South West Peninsula urgently needs a stronger strategic transport network and improving road infrastructure will be vital to capitalise on the benefits of the £110 million South Devon Link Road due for completion in 2015.”



**John Cridland, CBI Director General**  
*(from his letter to the Chancellor of the Exchequer, February 2013)*

We would like to see bold action to fast-track a limited number of projects to design and planning on the basis that there are pivotal in underpinning the Government's broader growth priorities: boosting our export capability and maximising the economic potential of all regions. On the road network, the M4 relief road, the A303 and the A14 should all fall into this category.

## Key Evidence:

# Infrastructure and the SW Economy

– the need for a stronger backbone

## South West economic challenge

The South West Peninsula has a population of almost 2.2 million people, twice as large as Tyne and Wear, one third larger than Glasgow City region and similar in size to West Yorkshire. The A303 includes the key growth centres of Yeovil, Salisbury, Taunton and Honiton along its route and plays a key role in accessing Wiltshire, Dorset, Somerset, Devon, Cornwall, Plymouth and Torbay. We believe that providing a more robust and resilient transport network to help accommodate peaks in traffic flow, accidents and other events such as the recent flooding, we can start to address some of the issues below and achieve our aim of a high quality reliable route to the South West and make a significant (GVA) contribution to the UK Plc.

## Growing economy from a low base

GVA per head is significantly lower in the areas served by the A303 with Wiltshire (£17,000), Dorset (£15,000), Somerset (£16,000) and Devon (£16,000) all lower than the national average of £20,341 (2011) This compares to a GVA per head of £25,000 for Bristol and £27,000 for Swindon (*Parsons Brinckerhoff A303 Infrastructure Study – Phase 2 Baseline Report*), both of which are served by a more resilient and robust transport network. In addition, GVA's in the region remain significantly below the EU average, partly due to poor connectivity. Any risks to the region's transport links are likely to threaten the growth of the local economy disproportionately and need to be avoided. Improved connectivity will ensure that investment confidence and business reputation in the region is maintained and grows. (*Devon: Extreme Weather Resilience 2013*)

## Low average wage

For all the counties in the study area, wages are below the South West average, ranging from a low of £25,000 in Devon to £28,000 in Wiltshire and lower than the UK average of £33,000. (*NOMIS, 2012*)

## Growing population

Population is growing at a faster rate than the national average, putting extra pressure on the demand for travel both on the local and strategic road networks.

## Business perceptions

Identified through our recent economic assessment for the route improvements, over 650 businesses surveyed believe:

- Journey time reliability on the route is a problem for many businesses, and disruption to business travel is identified as a particular issue, affecting 89% of businesses that responded
- Creating an end to end dual carriageway would have a strong positive impact for 50% of businesses, and a positive impact for a further 39%
- 62% of businesses reported that the improvement would have a positive impact on their turnover
- 77% of respondents felt that the improvement would increase investment in the area
- 77% of businesses said their site would be more viable as a business location if the route was an end to end dual carriageway.

(*Parsons Brinckerhoff A303 A358 A30 Corridor Improvement Programme Economic Impact Study*)



## Resilience

Severe flooding events were experienced across the South West peninsula throughout much of 2012 and early 2013. Access to the South West Peninsula was severely affected. Trunk Road closures were enforced at the following locations in late 2012 and early 2013:

- M5 between Taunton and Wellington;
- A35 between Dorchester and Bridport; and
- A303 at Ilminster.

Severe disruption to the Great Western and West of England main lines compounded the impact with continuous closures of up to 15 days. The UKCP09 climate projections for the Government show that this severe weather was not an anomaly and the South West is highly likely to experience this impact more regularly in the future. Initial research by Devon County Council shows the cost of the 2012/13 floods to the Devon economy and public services was £507 million and further work is now underway to analyse the total economic impact on the South West.

The financial implications are felt in terms of the increased maintenance burden which is placed on upper tier Authority revenue budgets in the short term, but also longer term when the legacy of the repairs becomes clearer. Furthermore there is a more wide-spread impact on the Peninsula economy both in the short term through operational issues, but perhaps more damagingly, in the longer term through a lack of strategic transport resilience and connectivity which will affect economic output and investment confidence.



### Transport

Together with the M3, the A303/A358/A30 road corridor makes up one of only two routes from London to South West England saving approximately 30 miles when compared to the M4/M5 route. There are also key towns along the route which have no viable alternative other than the A303, such as Chard, Ilminster, Wincanton, Yeovil and Amesbury. Much of the route is already dual carriageway, but seven intervening sections of single carriageway road create a large variation in standard, causing frequent congestion and accidents making journeys unreliable and extremely frustrating for drivers and businesses.

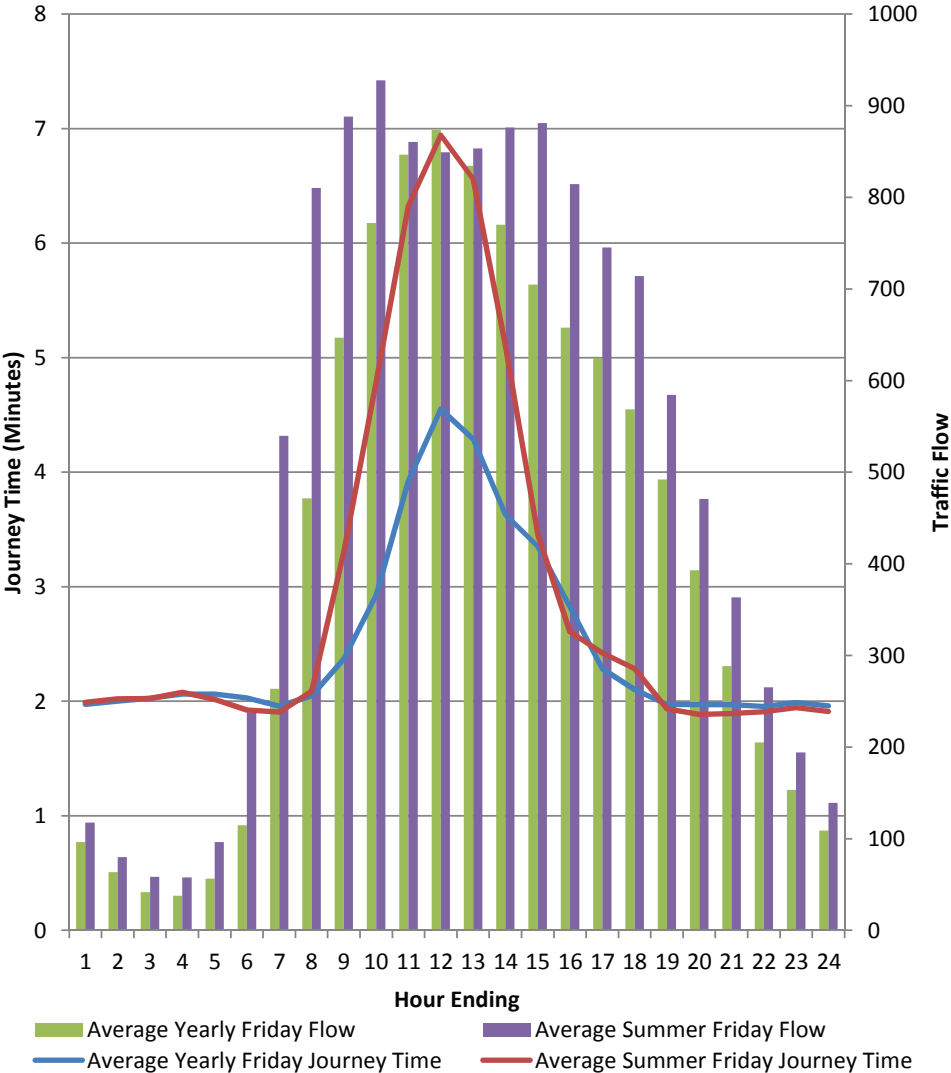
### Traffic flows

Traffic flows along the route are characterised by a significant variation in daily traffic flows throughout the year. This makes the corridor very unreliable for users to predict the length of their journey, with average journey times between Amesbury and M5 Junction 29 varying from 90 minutes to 135 minutes. Reduced link speeds on the single carriageway sections highlight the congestion and delay experienced by road users, as demonstrated by the chart below. It is shown that on this particular section, average summer Friday journey times increase from 2 to 7 minutes as traffic flows increase. Within these averages there are significant variations. Traffic flows are shown to peak at approximately 900 vehicles per hour demonstrating the low capacity of the road. The majority of congestion is caused by the 2 lane sections reducing to 1 lane.

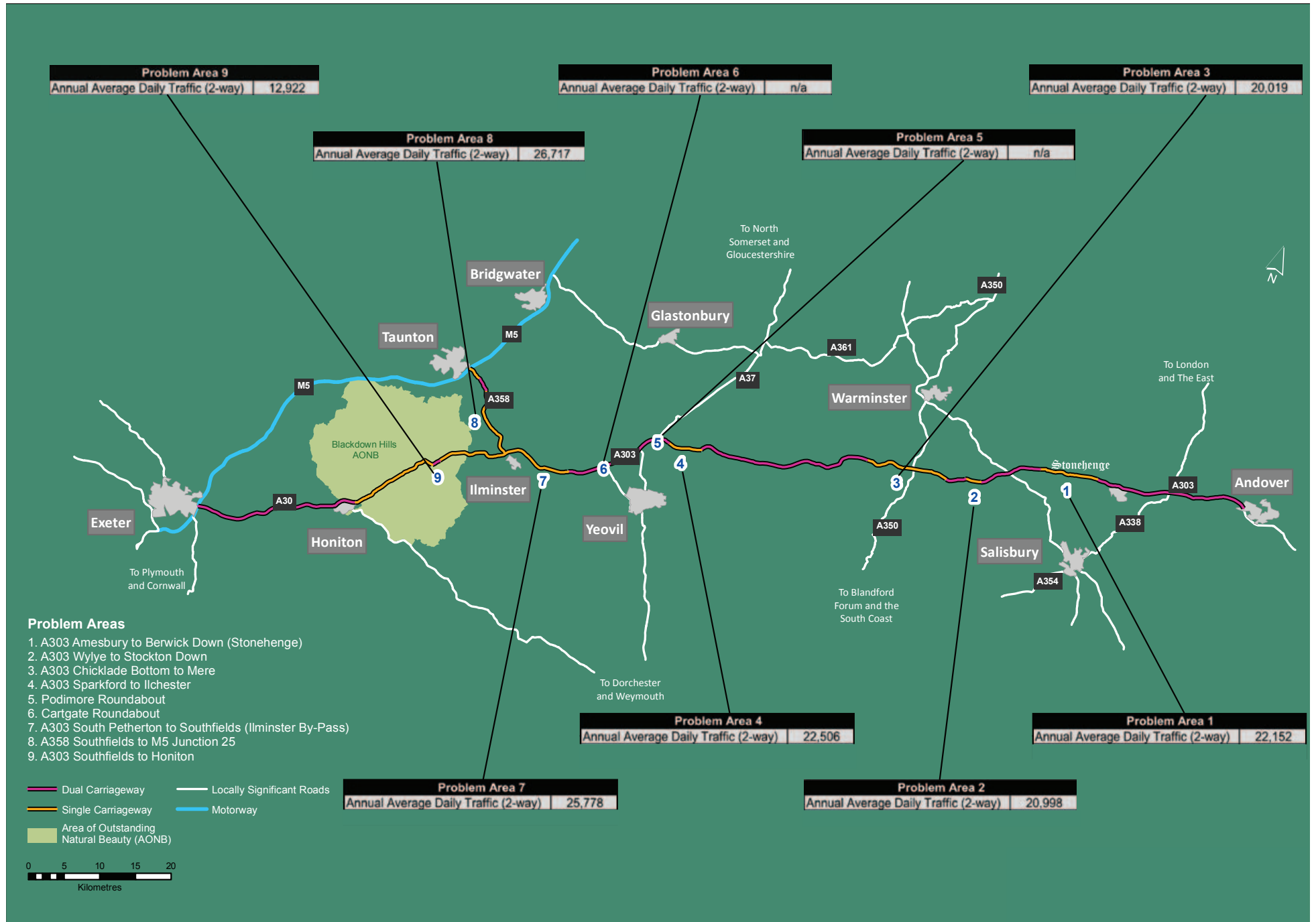
### Accidents

Between 2007 and 2011 there were 594 accidents on the single carriageway sections of the route. On average a collision occurs every 6 days on the A303 (*Devon and Somerset Fire and Rescue Service*). The Sparkford to Ilchester section has a higher collision rate than the average for single carriageway 'A' roads. Providing a consistent continuous level of service will help reduce the number of conflict points along the A303 and thereby reduce the potential for accidents.

### Westbound Friday journey times and traffic flows past Stonehenge between A344 and A360 (2009)



# Existing conditions



## Key Evidence:

# The scheme

## Scheme description

Ultimately a dual carriageway standard is desirable from Amesbury to Taunton because existing flows throughout the year are higher than can be sustained by a single carriageway. Further work is required to establish if there are locations where a lower standard of improvement would still provide the majority of the transport benefits but at a lower cost through 'value engineering'.

Between Ilminster and Honiton the standard and scale of the proposal aims to be consistent with the lower traffic flows. The proposal is a single carriageway that is mainly on the line of the existing road with improvements at junctions and other locations where performance is poor, such as steep gradients.

## Environmental issues

The scheme design will proceed hand-in-hand with developing suitable environmental mitigation in consultation with the statutory bodies. The environmental impact of the route as it passes through villages, the Blackdown Hills AONB and Stonehenge, Avebury and Associated Sites World Heritage Site has the potential to be significant. Through careful design and working with stakeholders the authorities are confident that an improved route can be established which will be generally acceptable and capable of being defended at a public inquiry.

Stakeholders such as Natural England have commented on the opportunity that such an improvement would provide to enhance the local environment given the right treatments.

## Scheme costs

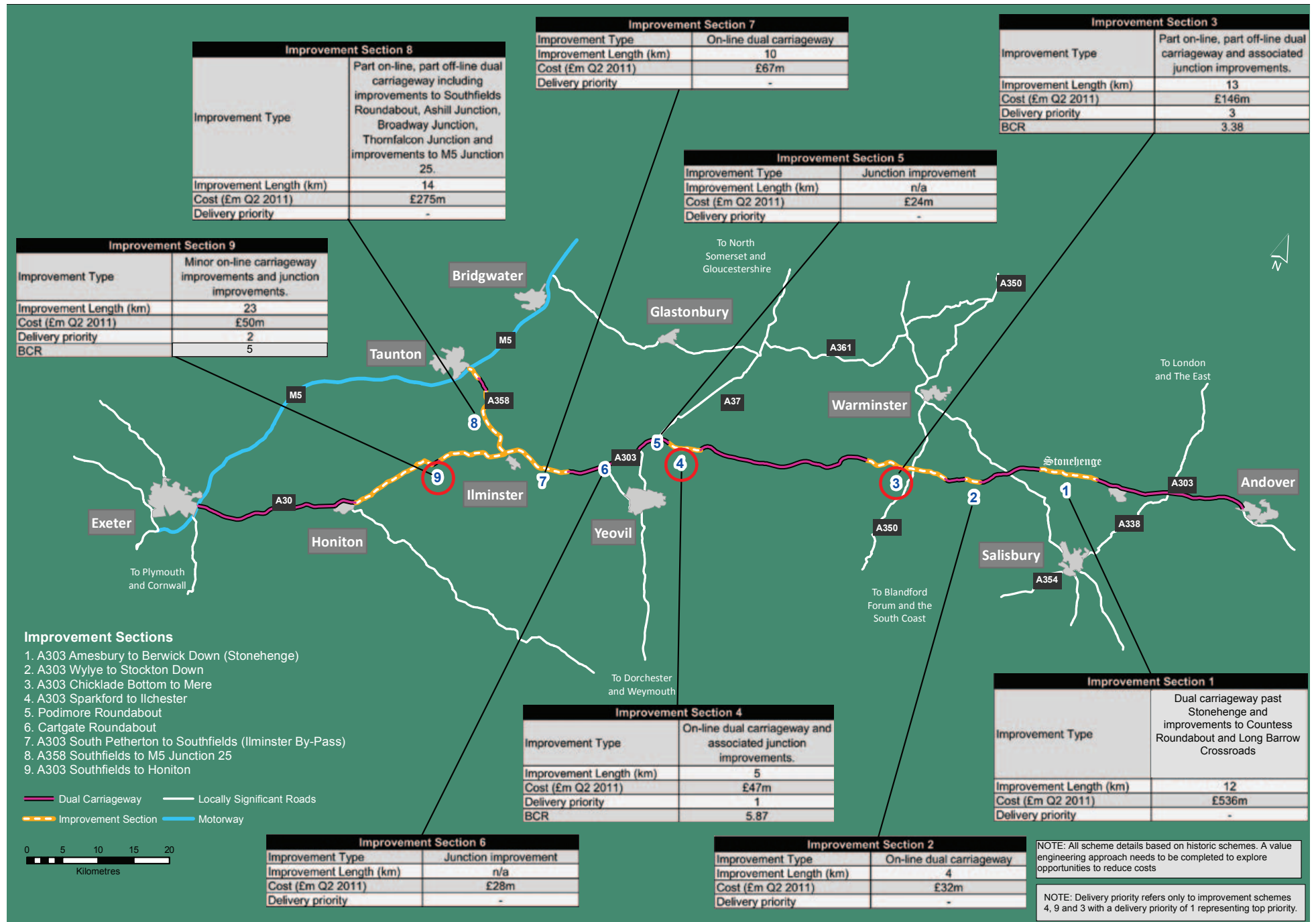
The scheme cost estimates are shown on the diagram and have been based on those made for the historic schemes, where these existed, and have been adjusted for current prices (cost inflation). Other costs have been based on initial engineering feasibility estimates as appropriate. A value engineering approach needs to be completed to explore opportunities to reduce costs.

## Scheme delivery

Although the provision of an end to end dual carriageway would provide for the maximum level of economic benefit to be realised, the economic benefits could be realised in stages over time through a phased approach to improving the route. The immediate schemes we are proposing for delivery centre on the single carriageway sections (where the majority of flow breakdown occurs) and not the junctions which may have higher BCR's. This is down to the fact that the junction improvements on their own without the single carriageway improvements would be out of context with the overall route standard. The opportunity to improve journey time reliability and network resilience through an incremental approach to delivery should be grasped, and not delayed by the recognition that some problems such as resolving the appropriate solution for Stonehenge may be challenging and longer term.



# Scheme plan



## Key Evidence:

# Scheme benefits

## National Infrastructure Plan

The scheme helps the Government's strategy to drive forward growth by investment in the UK's economic arteries. Our proposals will deliver substantial economic gains through investment in a vital infrastructure artery for the South West. They would strengthen resilience and enable Government to maximise the economic returns of its investments in broadband connectivity, the A30 (Temple) and the South Devon Link Road.

## Transport economic efficiency

The scheme has beneficial impacts in terms of reducing journey times for traffic and the number of accidents. Peak journey times from Amesbury to Honiton are forecast (2023) to reduce by up to 30 minutes if the route is improved (*Parsons Brinckerhoff A303 A358 A30 Corridor Improvement Programme Economic Impact Study*). The key benefit is that journey times will become more reliable removing the uncertainty which currently affects the route.

Overall the scheme has a Benefit to Cost Ratio (BCR) of 2.31 which represents good value for money (*Parsons Brinckerhoff A303 A358 A30 Corridor Improvement Programme Economic Impact Study*). When individual sections of the scheme are considered, certain sections have BCRs of 5+. This is without incorporating the wider economic impacts discussed below and without value engineering the schemes to reduce costs. However, this assessment assumes that the scheme is fully funded by Government bodies.

## Connectivity, reliability and resilience

The A303/A358/A30 corridor provides a crucial link to and from the South West. An end to end dual carriageway would improve connectivity and improve journey time reliability along the route. Benefits in these areas will be both real reliability improvements and improvements of the perception of accessing the South West which will help encourage inward investment.

Dualling will help increase route resilience which will further improve journey time reliability resulting in time and cost savings for business, which will promote economic growth. The M4/M5 corridor also has its own issues as some sections of the corridor are at capacity during peak periods and the route is subject to regular congestion, resulting in improvements now being implemented. An end to end dual carriageway on the A303 corridor would encourage a transfer of trips off the M4/M5 corridor reducing the need for further costly schemes on this corridor and breaking the existing capacity cycle and adding greater resilience and journey time reliability.

With the current 1:100 year winter rainfall event becoming a 1:35 year event by 2040 (*Met Office 2012*), this places greater importance on having a second strategic route to the South West that is resilient to coping with such severe weather.

## Wider economic impacts

The wider economic impacts of the scheme have been calculated, including regional GVA (total of all revenues, from final sales and (net) subsidies, which are incomes into businesses) and impacts on employment and tourism. Given that GVA is a recognised measure of economic activity at a regional level, it is therefore extremely useful as a measure of how the road improvements could benefit the overall economy of the South West. An economic model has been developed, and populated with economic data including new information from surveys of over 650 businesses and 600 tourists using the route.

The headline benefits calculated using the model, for an opening year of 2022 and a standard 60 year appraisal period are shown below. In total the scheme is expected to generate £41.6bn of economic benefit (GVA), and create 21,400 new jobs.

Impact	Predicted benefit
GVA impact	£41.6bn
No of new jobs created	21,400
Employment – tax generation	£2.4bn
Employment – welfare payment savings	£1.3bn
Employment – disposable income	£3.5bn
Employment – multiplier impacts	£1.9bn
Increase in tourism spend	£8.6bn
Other tourism benefits	£3.3bn
<b>Total (without GVA impact)</b>	<b>£21.2bn</b>

*(Parsons Brinckerhoff A303 A358 A30 Corridor Improvement Programme Economic Impact Study).*

The largest economic benefit of the scheme will be on promoting economic growth through an increase in GVA. There are a number of direct financial benefits to central Government (e.g. direct taxation increases). The local and regional economy will benefit from increases in the disposable income of people employed in the area, which in turn will create a ‘multiplier effect’ benefiting businesses in the area further. Tourist visitor numbers and associated spend and employment will increase, as well as land values.

## Carbon benefits

Further work is required to fully understand the carbon benefits of the scheme. If the A303/A358/A30 corridor is considered in isolation, the level of carbon emitted per vehicle kilometre would be likely to decrease with less congestion. However, our work to date, when calculating any carbon benefits, does not take into account any changes in journey length, any benefits from the reduced congestion at junctions and any reassignment of traffic. If a wider study area is considered, including the M4 / M5 corridor, and the outputs from SWARMMS, the benefits of providing a second strategic route to the south west would mean shorter journey times resulting in a 9% reduction in carbon emissions. *(Halcrow London to South West and South Wales Multi Modal Study Appraisal Report – Preferred Strategy May 2002)*

In addition, there will be a real improvement in HGV emissions due to the reduction in gradients and more even speeds created by the improvements. This is an area of research we would seek to assist the DfT in development more fully.

## Environment and heritage

At this early stage some stakeholders, such as Natural England, have commented on the opportunity that such an improvement would provide to enhance the local environment given the right treatments. There are also potential heritage benefits associated with the section at Stonehenge.

## Importance of Tourism

Given the importance of the South West to UK’s tourism economy, improving the efficiency and resilience of the strategic road network would support the Government’s Tourism Policy objectives. Tourism is one of the UK’s top six industries and our third largest export earner. The South West is the biggest tourism economy outside of London. Government Tourism Policy recognises the importance of prioritising improvements and repairs to road networks to improving the UK’s overall tourism efficiency and competitiveness. Government policy identifies disruption and delays on the road network as a barrier to growth in the tourism economy. *(Government Tourism Policy, Department of Culture, Media and Sport, 2011)*

## Contact details

If you would like further information on the work undertaken to date, please contact:

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