

SC1 - Scheme Description and Plan(s)

Key Elements of the Scheme

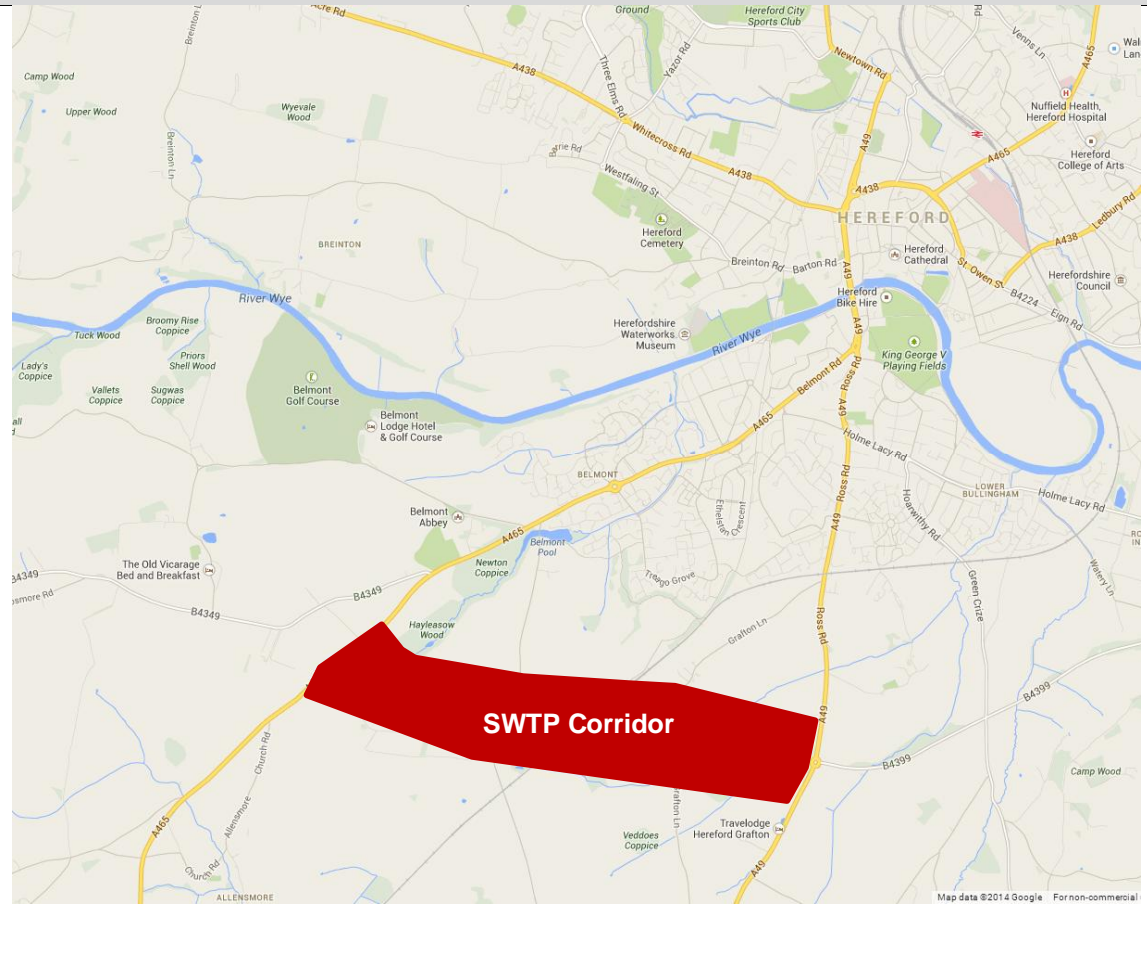
- The South Wye Transport Package (SWTP) provides the following key elements:
 - New link road linking A465 with A49
 - Pedestrian crossing improvements to Belmont Road and A49 in Hereford urban area
 - Cycle and walking provision on and off road at A49 and A465
 - Residential cycling schemes in Belmont and Bullingham
- Without this scheme the HEZ cannot be developed. The current congestion on the A49 is a significant blocker to further development at the HEZ. This scheme will reduce that congestion in conjunction with improving the environment in the immediate vicinity of the A49/A465 junction, a current AQMA.
- The placement of this route will be of particular benefit to traffic travelling between the Hereford Enterprise Zone (HEZ) and the A465, significantly shortening the journey. This will enable further development at HEZ.
- The reduction in congestion north of the proposed route on the A49 and A465 will enable a significant improvement to the Belmont and Lower Bullingham areas, particularly by:
 - Reducing severance on these roads which cut through the centre of the city and residential areas
 - Reducing air and noise pollution owing to traffic volume reductions and the removal of most HGV traffic
 - Enabling better public transport services running on less congested roads
- The scheme will provide increased capacity at key junctions in Hereford allowing for further residential and commercial development.

Summary Plan

- The SWTP will feature a single lane carriageway of trunk road standard, approximately 2 miles long.
- The road will run east to west between the HEZ access roundabout (where A49 meets B4399) and the A465 (between the A465 junctions with B4349 and Church Road).
- The route (as shown below in 'Scheme Drawings') will predominately go through open countryside with the following exceptions:
 - Grafton Wood
 - Grafton Lane
 - Withy Brook
 - Railway line
 - Access lane at a point between Merryhill Farm and Haywood Lodge
- The junction with the A465 will most likely be a roundabout or traffic lights.

Scheme Drawings

SC1 - Scheme Description and Plan(s)



SC2 - Problems and Evidence of Scheme Contribution to their Resolution

Transport Problems

- The A49 between the A4103 and A466 was identified as by far the worst sections on the A49 for journey time reliability in the MAC 9 A49 A466 to A103 Congestion Study undertaken by Amey and the Highways Agency.
- The morning peak is identified as having average speeds as low as 5mph with the evening peak as low as 8 mph.
- All junctions with the A49 in the 2012 Congestion Study area were identified as operating above capacity in the Am and PM peak period. On line improvements were considered in that study with junction performance capable of being improved. All junctions remained operating at above capacity in the AM and PM peak.
- Large volume of traffic on A465 and A49 hinders access to public transport, e.g. crossing the road to bus stops and no journey time benefit for public transport users.
- Accident rates are consistent with congested network causing a high number of shunt accident types. The key access points to Hereford city demonstrate a high number of non motorised user collision, such as at the Barton Road junction.
- Poor public transport links to rural areas, owing to high congestion on key routes.
- Low level of resilience in network to blockages on the single River Wye crossing.
- The variability of journey times in Hereford has been demonstrated through previous studies with the table below an extract from page 16 of the 2012 Congestion Study. This level of delay an variability

| Table 1: Journey Times on A49 through Hereford | | | |
|---|------------|-----------------------|-----------------------|
| From the A49 Roundabout south of Bullinghope to the A49/ A4103 Roundabout in each direction (Average of 3 runs in each direction) | | | |
| Date | Period | Northbound | Southbound |
| 08/09/2010 | AM Peak | 16 minutes 42 seconds | 12 minutes 32 seconds |
| 15/02/2011 | AM Peak | 30 minutes 57 seconds | 13 minutes 24 seconds |
| 16/02/2011 | AM Peak | 30 minutes 32 seconds | 13 minutes 39 seconds |
| 17/02/2011 | AM Peak | 28 minutes 45 seconds | 12 minutes 16 seconds |
| | | | |
| 15/02/2011 | Inter Peak | 30 minutes 09 seconds | 10 minutes 06 seconds |
| 16/02/2011 | Inter Peak | 34 minutes 59 seconds | 10 minutes 45 seconds |
| 17/02/2011 | Inter Peak | 17 minutes 39 seconds | 14 minutes 36 seconds |
| | | | |
| 16/09/2010 | PM Peak | 12 minutes 22 seconds | 15 minutes 43 seconds |
| 15/02/2011 | PM Peak | 22 minutes 40 seconds | 10 minutes 43 seconds |
| 16/02/2011 | PM Peak | 20 minutes 15 seconds | 10 minutes 07 seconds |
| 17/02/2011 | PM Peak | 12 minutes 31 seconds | 10 minutes 53 seconds |
| | | | |

Wider Policy Problems

- The Hereford MOSAIC study shows 45% of South Wye areas (such as Belmont) are in the worst group with regards to social deprivation. Indices relevant to transport that score poorly in these areas are:
 - Car Ownership
 - Obesity (busy roads make walking and cycling difficult and unsafe)
 - Access to public transport
- Market failure:
 - Major congestion on the A49 is the key factor holding back development of 3000 houses within the city boundary.
 - Smaller schemes aiming to enable further development at the HEZ are projected to provide negligible benefits. The 2014 Hereford Enterprise Zone Transport Assessment indicates that only 8% of the potential development up to 2018 can be released through online improvements.

Contribution of the Scheme to Problem Resolution

| CONTEXT | INPUT | OUTPUT | OUTCOMES | IMPACT |
|--|-----------|---|--|---|
| A49 & A465 Congestion | SWTP road | Alternative route between A49 and A465 | Significant reduction in traffic volume on A49 & A465 north of the new road. | Release economic potential of the HEZ |
| Poor access to public transport (i.e. bus stops) | | Lower congestion on A49 & A465 in residential areas | Improved severance enabling better and safer access to public transport | Subsequent reduction in traffic volume, further improving situation. |
| Poor public transport links to rural areas | | Lower congestion on A49 & A465 | Better public transport services enabled south of the River Wye. | Public transport more widely used as alternative to car in rural areas. |
| Low resilience in network | | Route between A49 and A465 no longer requires traffic to travel within close proximity of | River Wye bridge closure will impact a lower volume of traffic and have no impact on vehicles travelling from Hereford Enterprise Zone | Enables part of the HEZ development to be unrestricted by Wye crossing pinch point. |

Strategic Outline Case (SOC) Proforma

| | | | | | |
|--|---------------------------------------|--|---|---|---|
| | | | River Wye crossing. | to A465 or south on A49. | |
| | Social deprivation in South Wye areas | | Improved public transport services and improved severance owing to lower traffic. | Sufficient alternative transport to cars will reduce impact of low access to cars. Improved severance will enable more walking, cycling and better use of public transport. | Lowering social deprivation, increasing opportunities, standard of living and land value. |
| | Market failure | | Congestion eased on A49 and A465 | Further development enabled in HEZ and development of 3000 houses can begin. | Increased jobs, economic activity. |

SC3 – Consequences of Failing to Implement the Scheme

Consequences in the Absence of the Scheme

Market failure – Congestion on A49 and A465 and the resulting worsening journey times and journey time reliability will hinder further development at the site. Absence of scheme will severely restrict the development of new housing proposed by the private sector.

Worsening car use problem – increase in traffic will lower accessibility to public transport and use of roads for walking/cycling. This will result in more car use and a continually worsening situation.

Extended social deprivation – Areas of MOSAIC study where South Wye areas score badly will continue to worsen, which will be detrimental to the quality of life of residents.

SC4 – Aims and Objectives

Scheme Objectives

The local objectives for the scheme are:

- Reduce congestion in Belmont
- Reduce pollution in Belmont
- Reduce social deprivation in Belmont
- Do not have a detrimental effect on A49 or JEZ congestion or journey time

Strategic Outline Case (SOC) Proforma

A summary of how the SWTP will achieve the local objectives (detailed in next sub-section) and therefore regional and national objectives is shown below:

| LOCAL OBJECTIVE | RELEVANT ASPECT OF SWTP SCHEME |
|-----------------|--|
| SWTP 1 | Link road provides alternative route between A49 and A465, which does not pass through Belmont, therefore reducing traffic volume and congestion in this urban area. |
| SWTP 2 | <ul style="list-style-type: none"> - Reduction in traffic volume will lower pollution - Ease of congestion will lower standing traffic, also reducing pollution - The ease of traffic on the A465 through Belmont will increase the amount of people using public transport and other non-car modes of transport such as walking and cycling. |
| SWTP 3 | <ul style="list-style-type: none"> - Improved public transport services and severance on quieter urban roads will provide sufficient alternatives to car travel, reducing the significance of having poor or no access to a car, which is common in the Belmont area. - Increased feasibility of cycling and walking will reduce obesity problems in South Wye areas. - Better access from Belmont (and other South Wye areas) to commercial zones, such as the City Centre and HEZ, for job opportunities. |
| SWTP 4 | The link road will provide an alternative route between the A49 and A465, resulting in a significant reduction in congestion on both roads north of this new link. The link road will join the A49 at the HEZ access roundabout, maximising the positive impact on HEZ journey times. |

Contribution to Wider Objectives

South Wye Transport Package Objectives:

| Local Objective | Objective Description | Relevant National Objective(s) | Relevant Regional Objective(s) |
|-----------------|---|------------------------------------|--------------------------------|
| SWTP 1 | Reduce congestion in Belmont | DT 4, NR 8 DCLG 1, 3 | LTB 1c |
| SWTP 2 | Reduce pollution in Belmont | DT 1 NR 7 DCLG 4 | LTB 1b |
| SWTP 3 | Reduce social deprivation in Belmont | DT 3 NR 1, 6, 8, 9 DCLG 2, 5 | LTB 1a, 4 |
| SWTP 4 | Do not have detrimental effect on A49 or HEZ congestion or journey time | DT 3, 4 NR 1, 8 DCLG 1 | LTB 1a, 1c, 2, 4 |

Wider Objectives

1 NATIONAL OBJECTIVES

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1.1 (DfT WebTAG)

| DfT Objective | Objective Description |
|---------------|--|
| DT1 | ENVIRONMENT – To protect and build the natural environment |
| DT2 | SAFETY – To improve safety |
| DT3 | ECONOMY – To support sustainable economic activity and get good value for money |
| DT4 | ACCESSIBILITY - to improve access to facilities for those without a car and to reduce severance |
| DT5 | INTEGRATION - to ensure that all decisions are taken in the context of the Government's integrated transport policy |

1.2 Highways Agency

The Highways Agency (HA) have the same principal objectives as webTAG. Route Based Strategy (RBS) including A49 yet to outline objectives.

1.3 Network Rail

All Network Rail objectives can be easily grouped under DfT objectives:

| Relevant DfT Objective | Network Rail Objective(s) | Objective(s) Description |
|------------------------|---------------------------------|--|
| DT1 | NR2 NR3 NR4 NR5 NR7 | - Efficient use of natural resources; - Energy efficient; - Low carbon energy; - Resilient to changes in climate; - Reduce air, water & land pollution |
| DT2 | NR11 | - Health and safety |
| DT3 | NR1 NR6 | - Value for money; - Manage land as to increase value |
| DT4 | NR8 | - Improve accessibility and inclusivity |
| DT5 | NR9 | - Positive contribution to neighbours and communities |

1.4 Department for Communities and Local Government (NPPF Objectives)

Many overarching objectives similar to DfT (Appendix **Error! Reference source not found.**).

Transport specific objectives below:

| Relevant DfT Objective | DCLG Objective(s) | Objective(s) Description |
|------------------------|-------------------|--|
| DT1 | DCLG 4 | - Incorporate facilities for charging plug-in and other ultra-low emission vehicles |
| DT2 | DCLG 3 | - Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street |

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| | | |
|-----|---|--|
| | | clutter and where appropriate establishing home zones |
| DT3 | DCLG 1 DCLG 6 | - Accommodate the efficient delivery of goods and supplies - Conserve heritage assets |
| DT4 | DCLG 2 DCLG 5 | - Give priority to pedestrian and cycle movements, and have access to high quality public transport facilities - Consider the needs of people with disabilities by all modes of transport |
| DT5 | Overall statement is to 'support local strategies to deliver sufficient facilities and services'. | |

2 REGIONAL OBJECTIVES

2.1 Marches LTB – Relevant Strategic Objectives

| Relevant DfT Objective | LTB Objective(s) | Objective(s) Description |
|------------------------|--------------------------|--|
| DT1 | LTB 1b | - Reduce carbon emissions |
| DT2 | | |
| DT3 | LTB 1a LTB 2 LTB 4 | - Deliver the transport priorities needed to support the adopted economic growth of the Marches Sub-Region - Work with the LEP to secure access to other transport funding opportunities - Scrutinise business case work submitted by the scheme promoters, with particular regard to deliverability and value for money |
| DT4 | | |
| DT5 | LTB 1c | - Deliver the transport priorities needed to support the transport strategies of the Marches sub-region. |

SC5 – Key Beneficiaries

Groups of People

- The key beneficiaries of the scheme include:
 - Residents of Belmont that are being bypassed by traffic on the SLR who will see less traffic, fewer HGVs, improvements in air quality and greater opportunities to use active transport modes which will enhance health and fitness;
 - Residents of Belmont will experience less severance as traffic on the A465 will reduce, reducing the barrier effect of high traffic volumes. As additional formal crossing points are also planned, these too will reduce severance and enhance a sense of community.

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- Users of public transport into and within the city that will benefit from lower volumes of traffic and congestion on their journeys
- Unemployed residents as the ability to deliver employment land will improve their opportunities to find work.
- Non motorised road users will be able to use the network more safely.

SC6 – Communications, Consultation and Stakeholder Management

Communications Strategy

- A communications plan for the SWTP was put in place from January 2013 to keep the public and key stakeholders informed. This plan has been implemented successfully with key public events and feedback captured in a communications register.
- Methods of communications are through a combination of letter, email, press releases, public events, workshops, formal public consultation and through the Herefordshire Council website.
- The key stakeholders have been grouped into the following, with a full list of stakeholders available on request:

| Key Stakeholders | |
|---------------------------|---|
| Group | Members |
| Client- Management | <ul style="list-style-type: none"> • Director for Places & Communities • Assistant Director Place Based Commissioning • Project Steering Group |
| Client- Technical | <ul style="list-style-type: none"> • Project Manager • Transportation Department • Economics Department • Property Department • Conservation Department • Forward Planning Department • Development Control Department |
| Statutory Authorities | <ul style="list-style-type: none"> • Highways Agency • Environment Agency • Natural England |
| Elected Representatives | <ul style="list-style-type: none"> • Cabinet Members • Local Councillors |
| Non-Statutory Authorities | <ul style="list-style-type: none"> • Utility Service Providers (BT / E-On / Welsh Water etc.) • Emergency Services |
| Others | <ul style="list-style-type: none"> • Landowners (directly affected) • Local Resident (indirectly affected) • Community Groups • General Public |

- The key messages for the project will change over time. There are however a number of high level issues that have been identified early and had mitigation measures applied. They are summarised below:

Strategic Outline Case (SOC) Proforma

| Key Issues | |
|------------------------|---|
| Issue | Detail |
| Community Expectations | <ul style="list-style-type: none"> • Need for information / involvement |
| Historical Issues | <ul style="list-style-type: none"> • Previous issues / legacies (i.e. Rotherwas Access Road) • Dissatisfaction from landowners with respect to options / preferred route selected |
| Other Projects | <ul style="list-style-type: none"> • Need for a consistent approach between different projects (i.e. Destination Hereford) |
| Environmental Impacts | <ul style="list-style-type: none"> • Ecology • Noise • Air Quality • Water Quality • Visual Amenity |
| Engineering Impacts | <ul style="list-style-type: none"> • Construction (noise / vibration) • Access to property / land • Local traffic movement |
| Social Impacts | <ul style="list-style-type: none"> • Visual and noise impacts – changes to recreational amenity |

- The current stage in the development process for the scheme is Stage 2 of the 7 stage process summarised below:

Stage 1 – Preliminary Option identification

Stage 2 – Preferred Option identification

Stage 3 – Statutory Procedures

Stage 4 – Pre-Contract Design Stage

Stage 5 – Contract Award Stage

Stage 6 – Construction Stage

Stage 7 – Post-construction Stage

- The purpose and type of communications for each stage will vary. The current stage key objectives and purpose are shown below:

Strategic Outline Case (SOC) Proforma

Objectives

1. Update relevant stakeholders.
2. Inform relevant stakeholders of progress on the development of a preferred route and gain feedback as part of the scheme development process.

| Stakeholders could include: | Purpose: |
|---|--|
| <u>Affected Landowners</u> Landowners | <ul style="list-style-type: none"> • Advise on likely impact on property • Advise on compensation, mitigation measures, accommodation works etc. • Advise on land acquisition process • Entry permission for surveys |
| <u>The Public</u> Local Residents Local Lobby Groups Local Traders Road Users | <ul style="list-style-type: none"> • Detail the basis for selecting the preferred option • Detail the preferred option • Seek feedback on preferred option • Outline the next stage – "Statutory Procedures" • Confirm the benefits of the scheme • Reaffirm timescales for the scheme |
| <u>Elected Representatives</u> Local Council MP's | |
| <u>Other Interested Parties</u> Consultees to Environmental Statement | <ul style="list-style-type: none"> • Seek comment on the proposals |

- The full Communications Plan is available on request.

Consultation

- A key element of the Communications Plan is to keep stakeholders informed on the progress of the project and to gain feedback. This has been actively achieved through engagement by public meetings, workshop and information drop.
- The SWTP scheme has been consulted on with members of the public with two public meetings, one in March 2013 and another in June 2013. There was also an invited workshop consisting of the Parish Council, Cabinet Member, HC officers and consultants.
- Key changes in the project are communicated as required and through a regular series of information drops. Decisions on when and how to communicate are made in the Project Control Group meetings and, when required, through the Board.
- Information provided to the public is a non technical interpretation of the work to date in accessible formats.
- A full feedback register is kept up to date with support and opposition views. This is regularly shared at monthly meeting with an internal stakeholder views workshop due in February 2014.

Stakeholder Management

- We receive and welcome the views of the public by engaging with them and responding in a timely manner. We have received several recommendations for mitigation from interested parties that are incorporated into the options development and decision making process. This is an ongoing process.
- The council makes itself and its consultants available to meet with individuals if required, particularly those directly affected by the project.

SC7 - High Level Constraints and Inter-dependencies

Constraints and Inter-dependencies

- The most significant scheme within the package – the Southern Link Road – requires Local Development Framework (LDF) policies to allocate land for its route and residential development policies to include the requirement for contributions to the scheme. The LDF has yet to be adopted, so there is a risk that these policies may not be achieved.
- Land acquisition is required
- There are no substantial technical constraints as the scheme is standard highway construction.
- The package is linked primarily to the Hereford Enterprise Zone, which cannot be delivered without the scheme.
- The package does not rely on delivery of other schemes but is a first stage of a larger package of schemes known as the Hereford Transport Strategy.

SC8 – Option Assessment Report (OAR)

Option Assessment Report (OAR)

- A full OAR was prepared in 2003 identifying the key problems and those options best placed to mitigate.
- This work indicated that a package of multi modal measures was required to meet Herefords growing transport problems. The blended package as it was known, required the following elements to provide a balanced network:
 - Walking – Review of footway provision and pedestrian crossing facilities, dropped kerbs, pedestrianise city centre.
 - Cycling – Completed network of cycle routes covering all main radial direction.
 - Public Transport – Four park and ride schemes implemented. Monday to Saturday each week. Major bus priority on all radials and Inner Relief Road. Signal priority at junctions for buses. New rail stations at Rotherwas and Withington.
 - Highways – 20mph zones in residential areas. Junction improvements to accommodate bus priorities. Western distributor road
 - Parking – In accordance with Herefordshire Council Parking Strategy, ensure PNR/Publicly available balance is biased in favour of publicly available through development control. Increase existing provision to 2800 off street spaces and 800 Park and Ride spaces. Introduce on street charging related to Park and Ride provision.
 - Behavioural Change – Persuade 6% of car drivers by 2011 and 12% by 2031 to change mode over and above scheme generated modal shift.
- The OAR has been supplemented over time by a number of update reports. A selection of those are referenced below, representing a significant investment in understanding the implications of subsequent SWTP:

Strategic Outline Case (SOC) Proforma

| Table 1: Background Studies | |
|---|----------------|
| Report / Study | Date |
| Rotherwas Enterprise Zone – Base Transport Assessment | April 2013 |
| Hereford Relief Road Study of Options, Interim Forecasting Report Addendum: Reduced Housing and Employment Option | January 2012 |
| Hereford Relief Road Addendum to Study of Options Environmental Assessment Report | September 2011 |
| Hereford Relief Road Study of Options | September 2010 |
| Hereford Relief Road Interim Forecasting Report, Sustainable Option Packages | August 2010 |
| Stage 1 Assessment Report, Herefordshire Council, Hereford Relief Road (Issue 2) | August 2010 |
| Highways Agency (HA) – Hereford Enterprise Zone, Draft Local Development Order Consultation | May 2010 |
| Rotherwas Industrial Estate Phase 1 & 2 – Transport Assessment | May 2010 |
| Rotherwas Access Road Annex E Submission – Traffic Forecasting Report | July 2004 |
| Rotherwas Access Road Annex E Submission – Local Model Validation Report | July 2004 |
| Rotherwas Industrial Estate Access Study | June 2000 |

- A key change for the SWTP was the award of an Enterprise Zone to Hereford. This meant that the Southern Link element of the Western Relief Road was prioritised as a key lead infrastructure requirement for delivering the HEZ and reducing the severance, environmental impact of A49 on residents.

Economic Case (EC)

EC1 – Scope of Modelling and Economic Appraisal

Appraisal Specification Report (ASR)

- See attached ASR

EC2 – Value for Money (Transport User Benefits)

Transport User Benefits

- The package will deliver benefits by
 - Reducing journey times on the key access routes into Hereford
 - Providing alternative highway capacity by linking two arterial routes – making an option available to travellers should one of the route be impacted by an incident
 - Providing additional employment at the Hereford Enterprise Zone average incomes will increase in Belmont aiding its regeneration as residents will invest in their homes
 - The additional employment at HEZ will increase the number of

individuals and households with an income which in turn will bring greater spending power to Hereford strengthening existing businesses and providing opportunities for new businesses

- The highway scheme elements of the SWTP have been assessed and have the following BCR values taken from Herefordshire Transport Strategy – Prioritisation Study (JMP, 2014):
 - South Wye Transport Package: 3.55
- The above BCR elements are under review by Herefordshire Councils consultant.

Appraisal Summary Table

- Although the AST is not required at this stage we have used it as a template to guide the initial assessment of the various issues that need to be addressed. It should be noted that this is an initial assessment based primarily on qualitative work.
- The full AST will be completed as per DfT guidance, at the Outline Business Case stage (see DfT (2013) “Transport Analysis Guidance – Guidance for the Senior Responsible Officer” para 1.2.10).
- The preliminary AST is attached.

EC3 – Value for Money (Wider Economic Benefits)

Wider Economic Benefits

- *What will be the impact of the package on wider economic benefits, for example:*
 - There will be a positive reduction in the costs of travel to businesses, as freight to the B2 / B8 sites at HEZ will experience less congestion and business travellers will have faster and more reliable journeys due to additional capacity being provided in the highway network.
 - There will be no impact on opening up new markets that were previously unviable because of transport barriers.
 - There will be the removal of substantial barriers to inward investment which are primarily associated with transport challenges on the A49 corridor – this applies to both residential and employment development.
 - Several sites will become viable – residential sites at Lower Bullingham, Three Elms and Holmer West and employment sites at the HEZ
 - There will be no impact on increasing access to labour markets for Hereford residents
 - There will be no impact on training or education.
 - There will be no impact on local businesses trading with one another.

Economic Indicators

- Improving access and capacity for the Hereford Enterprise Zone will enhance and protect employment at the site;
- The impact on training and access to jobs that are otherwise outside of reasonable travel times is neutral.
- The main scheme within the package reduces the risk that housing provision

will be blocked on highway capacity grounds.

- The scheme improves the supply of employment land by allowing the planning conditions that presently limit development at HEZ to be extinguished.

Appraisal Summary Table

- Although the AST is not required at this stage we have used it as a template to guide the initial assessment of the various issues that need to be addressed. It should be noted that this is an initial assessment based primarily on qualitative work.
- The full AST will be completed as per DfT guidance, at the Outline Business Case stage (see DfT (2013) "Transport Analysis Guidance – Guidance for the Senior Responsible Officer" para 1.2.10).
- The preliminary AST is attached based on based on Herefordshire Transport Strategy Phasing Study – Strategic Prioritisation (JMP, 2014).

EC4 – Value for Money (Environmental Impacts)

Environmental Impacts

Introduction

The follow information below has been established by reviewing the existing environmental assessment and survey work undertaken to date to support the Strategic Outline Case. Predominately the findings from the Stage 2 Environmental Assessment Report (October 2013) have been summarised below. The information focuses on the potential beneficial and adverse effects of the Transport Package options.

Noise

The study area (600m either side of the off route and on route options) currently experiences low levels of background noise, being dominated by the local road network and villages around the southern outskirts of Hereford. The greatest volumes of traffic are on the A49, the main route south of Hereford and the A465 to Abergavenny. Minor roads in the Study Area are Haywood Lane and Grafton Lane, both of which have much lower volumes of traffic.

Sensitive receptors in the area are generally houses. Non residential sensitive receptors include Herefordshire NHS offices at Belmont Abbey, St. Michael's Abbey and RC Church, Hedley Lodge B&B, Graftonbury Garden Hotel and Broadmeadow Flying Club. Other sensitive receptors are located along the A465 where the sustainable transport measures are proposed and include a health centre at Newton Farm, a community centre, church, library and a hotel.

There is likely to be a considerable rise in noise levels for sensitive receptors close to the off route options during the construction stage, however this will only be temporary. All sensitive receptors will experience an increase in noise levels from the operational phase of all the off route options.

Based on the information available to date, options SC2, SC2A, SC5 and SC7 present more favourable aspects in terms of potential impact on the ambient

noise environment.

Air Quality

The study area is located in a rural environment, dominated by the local road network and villages around the southern outskirts of Hereford City Centre. There are two areas of woodland of local importance in the study area that could potentially be impacted from the route options. Newton Coppice and Hayleasow Wood is a Special Wildlife Site while Grafton Wood is not designated.

The nearest continuous monitoring station is located within the Air Quality Management Area (AQMA) on Edgar Street in Hereford City Centre. Hereford City AQMA has been designated within the City of Hereford, covering the A49 from Blackmarstone to Widemarsh and part of the A438 joining the A49. The AQMA is linked to road traffic emissions and is for exceedance of the annual mean nitrogen dioxide (NO₂) objective. Herefordshire Council report that the AQMA is likely to be extended soon as a result of diffusion tube monitoring showing exceedance of the annual mean NO₂ objective along the A438.

The construction phase of any of the off route options is likely to generate a considerable amount of nuisance dust, however this will only be temporary. The operational phase would see an improvement in air quality in areas currently experiencing high levels of vehicle congestion. Implementation of sustainable transport options will help improve air quality by encouraging cleaner modes of transport.

Greenhouse Gases

The proposed sustainable transport measures on Belmont Road include a dedicated bus lane from the roundabout at Tesco to Belmont roundabout and converting the existing footpaths along Belmont Road to a combined footpath/cycleway. These measures are aimed at reducing traffic on the Belmont Road through providing alternatives to the car. A reduction in traffic and less congestion on Belmont Road would be beneficial by leading to a reduction in greenhouse gas emissions.

Landscape

There are 56 visual receptors where residents, road users, cyclists, ramblers and commuters will be able to view the construction phase of the off route options. Road users will also be affected by the construction works where the tie in of the new route to the main A49 and B4349 occurs.

All 56 receptors will all be affected by the construction phase since they all experience views of the site however some properties have limited views due to the mature planting within their private garden areas and through the natural topography of the land. The distance to the proposed route will depend on the preferred option chosen and will of course affect the effect on each receptor. Construction machinery, materials and stockpiling of topsoil will alter the conditions, views and visual amenity that the receptors enjoy at the moment.

As the scheme involves the building of a new road within a rural setting which is mainly agricultural land. For most of the properties, the distances between properties and the new road will change. Visibility from several over receptors will be increased through the removal of the trees and hedgerow and the re-contouring of the land.

Most visual receptors depending on the preferred option chosen will be moderate as each route will affect receptors in such a way that all routes will be noticeable in view.

The introduction of replacement tree planting and mixed species hedgerow should help screen the new road within the landscape and enhance biodiversity.

In terms of the offline route options the route with the least amount of effect both on the landscape and the receptors is SC7. This route fits well with the natural topography of the existing landscape and will affect fewer properties; however the properties such as The Green, Vine Tree Cottage, Glendale, Merryhill Cottage, Beechwood, Merryhill Farm, Merryhill Park will see the most change as the proposed route is close to these properties.

Townscape

The introduction of a bus lane and the widening of the carriageway will result in a minor change in layout but only at a very local scale. The effects are likely to be felt most by residents along the southbound carriageway who stand to lose some of the garden space from the front of their properties as a result of widening between the bridge and Walnut Tree Avenue. Furthermore, the residents of Newton Cottages and some of the residents of Yarlinton Mill whose properties are adjacent to Belmont Road will be affected by the widening of the carriageway which will result in the loss of some of the grass verge and creation of a new section of pavement.

This option will result in a minor change to the appearance of the appearance of the townscape. This will only be experienced at a very local level, by residents, road users, pedestrians and cyclists. Widening of the carriageway in two places along the Belmont road will result in loss of both grass verge and garden space at the front of houses which will slightly reduce the 'green' appearance of the townscape.

The sustainable transport elements of the Transport Package will have slight adverse effects on the layout and appearance of the townscape, and slight beneficial effects on the human interaction characteristics of the townscape. The magnitude of the effects on the layout and human characteristics are assessed as minor, whilst the magnitude of effect on the appearance of the townscape is negligible. All of these effects are experienced only at a local level and will not significantly affect the wider townscape of the area. Therefore the overall effects of these elements are assessed to be neutral.

The offline options will have no indirect beneficial effects on the townscape of the area.

Heritage

There were no impacts on Scheduled Ancient Monuments by any offline or online options; they all are assessed as having a slight/slight to moderate impact on Listed Buildings.

All offline options would have an unknown impact upon the sites of findspots.

There is the risk that unknown archaeological remains may be encountered during ground-breaking operations. Discussions should be held with Herefordshire County Archaeologists to determine and agree a practicable approach to limiting and mitigating this scenario.

Biodiversity

The most significant effect that the offline sections will have on biodiversity is the reduction and fragmentation of the semi-natural woodland stands, Grafton Wood and or Newton Coppice ancient woodland (which comprises Newton Coppice and Hayleasow Wood). This habitat type is important to biodiversity, supporting a rich diversity of native flora and fauna.

Some of the offline options result in the removal of small areas of broadleaf woodland. These are typically small isolated plantations and are of lower importance to biodiversity, but do provide important foraging and breeding habitat for invertebrates.

Most of the habitat types removed through creation of an offline section will be of lower importance and therefore are of minor significance to the local biodiversity. These habitats include arable land and improved grassland fields, both of which are very common in the local area. The areas of these habitat types lost are an extremely small fraction of that of the total areas in the local vicinity. Loss of these habitat types is of minor significance to local biodiversity.

Water Environment and Flooding

The study area falls within the Wye catchment located within the Severn River Basin District, the third largest river basin district in England and Wales which covers an area of 21,590 km

As well as the River Severn and its main tributaries, the Avon and the Teme, this district includes rivers in southeast Wales, including the Wye, the Usk and the Taff and others which discharge to the Severn Estuary.

The principal water courses within the study area include Newton Brook and Withy Brook, a tributary of Norton Brook. Both are tributaries of the River Wye, a European designated Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). The River Wye is important for its riverine habitats and the species they support. The headwaters of the River Wye (Afon Gwy) originate in the Cambrian Mountains, Wales and discharges to the River Severn to the south.

The Environment Agency Flood Zone Map illustrates the worst-case scenario as it does not

Include the effect of any flood defence structures. According to the EA Map the study area contains no areas at risk of flooding. However, anecdotal evidence indicates that downstream of the study area Withy Brook and Newton Brook (near Belmont area) are known to locally flood.

Review of the FloodInsight Report (Reference HMD-411905, dated July 2012) indicates the extent of flood events recorded by the Environment Agency and previous bodies. This data does not take into account of flood management schemes or improved flood defences, such as Belmont and Hampton Bishop. No historic flooding has been recorded within the study area.

Even with mitigation measures in place, there is potential for significant effects from construction of the offline tour options on the surface water environment. It is assessed that there is potential for slight adverse effects to water quality during the earthworks stage and construction of the culverts.

Liaison with Environmental Organisations

- Consultation has been undertaken with the Parks and Countryside Services of Herefordshire Council who have raised concerns over the impact of noise on the public enjoyment of the Newton Coppice area of Belmont Haywood Country Park.
- For the Stage 1 Environmental Assessment work a consultation response was received from Hereford Council stating they were not aware of any existing sources of air quality problems.
- Previous consultation responses from Herefordshire Council County Archaeologist highlighted the location of the Grafton medieval complex as well as the potentially significant circular field boundary located south of the pedestrian link between Haywood Lane and Grafton Lane. Consultation undertaken for this assessment received responses from Hereford Council County Archaeologist and English Heritage. English Heritage response reiterates its comments from previous consultations for the southern core options, namely concerns regarding setting and impact on listed buildings and the need for the assessment process to consider all heritage assets. Their response also highlights that work is on-going on assessing assets in the Belmont area.

The Environment Agency has been consulted on the impacts on local water resources and any potential increase in flood risk which could be generated by the Transport Package options.

Appraisal Summary Table

- Although the AST is not required at this stage we have used it as a template to guide the initial assessment of the various issues that need to be addressed. It should be noted that this is an initial assessment based primarily on qualitative work.
- The full AST will be completed as per DfT guidance, at the Outline Business Case stage (see DfT (2013) "Transport Analysis Guidance – Guidance for the Senior Responsible Officer" para 1.2.10).

The preliminary AST is attached.

EC5 – Value for Money (Social Impacts)

All offline options will result in severance or disruption to Public Rights Of Ways (PROWs). Although all the offline options will have a combined footpath/cycleway, the proximity to traffic along the offline options compared to the traffic free routes along the PROWs, will not fully mitigate against the severance of rights of way. Therefore it is assessed to have a moderate adverse effect on pedestrians.

The effect on journey length is assessed to be neutral as most offline options have a similar length to the current route between the A49 and A465 using PROWs.

Stopping up of Grafton Lane is assessed to have a large adverse effect on pedestrians and cyclists due to severance of a section of National Cycle Network 46.

The provision of sustainable transport measures along the A465 will have a slight beneficial effect on physical fitness by encouraging alternative methods of transport to the car.

It is assessed that all the offline route options will have a neutral effect on traveller care.

Travellers' views will generally be improved for travellers along the offline routes from the existing route along the A49 and A465 on the urban outskirts of Hereford. Although views in areas of cut will be restricted to side slopes and landscaping along the slopes, overall it is assessed that the effect on travellers' views will be slight beneficial.

The provision of a new route between the A49 and A465 will have a moderate beneficial effect on traveller stress by allowing drivers to avoid the centre of Hereford to access Rother was from the south and west.

In terms of journey ambience, SC7 is the preferred option. There are less visually intrusive structures and less areas of cut with this option. The realignment of the B4349 to form an arm of the roundabout at the A465 will improve driver stress by making it easier for drivers to exit the B4349 onto the A465 and along the offline route.

Social Impacts

- Commuting and other users – POSITIVELY by reducing congestion on accesses to employment areas.
- Reliability impacts on commuting and other users – POSITIVELY as additional infrastructure will provide alternative routes in the event of an incident.
- Physical activity – POSITIVELY as the main highway scheme releases highway land for walking and cycling infrastructure
- Journey quality – POSITIVELY as travel which does not need to be made through the residential areas will have a high quality newly

constructed carriageway and that within the city will experience less congestion.

- Accidents – NEUTRAL – there will be reductions in accidents due to there being less traffic in the urban area, but collisions on rural roads are characterised by greater severity of casualties. Accident rates will be minimised by road safety audits during the design process.
- Security – NO IMPACT
- Access to services – POSITIVE – as reductions in congestion along with improved walk and cycle infrastructure will reduce the barriers to services experienced by residents of Belmont and Bullingham.
- Affordability – NO IMPACT
- Severance – POSITIVE – as reduced traffic volumes and increased walking and cycling provision will make travel within the city better for those with business in the city.
- Option values – NOT ASSESSED

EC6 – Value for Money (Public Accounts)

Public Accounts

- Herefordshire Council recognises the importance of the SWTP in delivering significant changes in line with the Local Transport Plan. The combination of benefits associated with this scheme has given it a high priority in the council's budgets.

Appraisal Summary Table

- Although the AST is not required at this stage we have used it as a template to guide the initial assessment of the various issues that need to be addressed. It should be noted that this is an initial assessment based primarily on qualitative work.
- The full AST will be completed as per DfT guidance, at the Outline Business Case stage (see DfT (2013) "Transport Analysis Guidance – Guidance for the Senior Responsible Officer" para 1.2.10).

The preliminary AST is attached.

Financial Case (EC)

FC1 – Capital Costs

Outturn Estimated Capital Costs

- A Capital Cost estimate has been undertaken as part of the 2014 Phasing Study. The overall SWTP programme has an estimated Capital Cost as shown below:

| Package Element | Capital Cost £ |
|--|-----------------------|
| A465 public realm scheme to reduce severance and encourage use of active modes | 3,000,000 |
| A465/A49 Southern link (including risk adjustment at 50%) | 29,729,000 |
| Cycle and walking schemes in Belmont | 1,000,000 |
| Cycle and walking schemes in Bullingham | 1,000,000 |

- This excludes the revenue based stream associated with Personal Travel Planning (PTP) being undertaken to compliment the overall delivery of SWTP.

Breakdown of Estimated Capital Costs

- The breakdown of capital cost for the scheme is currently under review following the 2014 Phasing Study report.

Risk

- Risk workshops have been held throughout the duration of the project. This has most recently been updated in October 2013, covering the following key areas:
 - Legislative risk
 - Policy risk
 - Construction risk
 - Planning risk
 - Operational risk
 - Inflation risk
 - Demand risk
 - Design risk

The risks identified are actively managed as part of the SWTP Project Control Group at monthly meetings. The PCG have proposed a further risk workshop to take place in February 2014. Full details of risks and assigned severity rating can be provided on request.

Cost Reduction Potential

- A risk adjusted cost has been investigated, indicating that there is significant potential savings available from value engineering and risk management. The Southern Link element of the SWTP has a risk adjusted cost of £9,910,000.00 representing significant potential for cost reduction.

FC2 – LTB, Local Transport Authority and Third Party Contributions

- The breakdown of costs and contributions is shown below.

| Project Number | Package/project | Where | When | Cost (capital) | | | | | Cost (revenue) LTP/LST F/Other |
|---|--|---------------------------------|-----------|--------------------|---------------------|----------------------|----------------------------|--------------------|--------------------------------|
| | | | | Growth Fund | Other Contributions | Local Transport Plan | Private sector (estimated) | Total | |
| South Wye Transport package (NB. In addition to those schemes and activities described above, where shown) | | | | | | | | | |
| 27 | A465 public realm scheme to reduce severance and encourage use of active modes | A465 south of the Wye | Post 2018 | £2,500,000 | | £300,000 | £200,000 | £3,000,000 | |
| 28 | A465/A49 Southern link (risk adjusted at 50%) | Within existing route corridor | Post 2018 | £24,729,000 | | | £5,000,000 | £29,729,000 | |
| 25 | Cycle and walking schemes in Belmont | Belmont | Post 2018 | £800,000 | | £200,000 | | £1,000,000 | |
| 26 | Cycle and walking schemes in Bullingham | Bullingham | Post 2018 | £200,000 | | £200,000 | £600,000 | £1,000,000 | |
| 29 | PTP in South Wye area | Bullingham and Red Hill | Post 2018 | | | | | | £30,000 |
| | South Wye Total | Transport package Totals | | £28,229,000 | | £700,000 | | £34,729,000 | £30,000 |

Third Party Contributions

- HC is in current active communications with developers at three sites, known as Three Elms, Lower Bullingham and Holmer West. The developers are investigating how best to mitigate their impacts. Negotiations to date have indicated financial contributions are the preferred method of mitigating the impact of development.
- The latent demand for development has led to an inability to release land due in part to the roading network. There is unlikely to be significant development in Hereford without solving the current traffic problems. Therefore the contributions required to develop infrastructure to release development is mutually beneficial to both parties.

FC3 – Whole Life Costs and Maintenance Liabilities

Whole Life Costs

- These are currently under review.

Maintenance Liabilities

- Current cost estimates have not identified the maintenance liabilities for providing the SWTP. The Project Control Group requested a report into the likely implications of ongoing maintenance to be submitted in draft end of February 2014.

Commercial Case

CC1 – Income Generation

Income Generation

- HC explored the potential for Park & Ride sites serving the city. The Phasing

Study has indicated that Park & Ride is not feasible for Hereford. HC intend to revisit the potential for income generation at Outline Business Case.

CC2 – Procurement Options and Strategy

Procurement Options

- Herefordshire Council are currently exploring the options for procurement and expect to outline their position through liaison with the Project Board in March 2014.
- The procurement options will be explored in further detail at Outline Business Case in line with Department for Transport guidance.

Procurement Strategy

- The procurement options will be explored at Outline Business Case in line with Department for Transport guidance.

Management Case

The order in this section has been changed to make the proforma more logical.

MC1 – Project Programme, Risks and Deliverability

Programme

- A summary of the programme for SWTP is shown below on page 31. The SWTP programme is under continual review.

Risks

- The key risks and their classification for the SWTP are listed below:
 - No fixed alignment (Cost)*
 - Local Action Groups (Project and Programme)*
 - Public inquiry/legal challenge to the Core Strategy (Project and Programme)
 - Compulsory Purchase Orders (Project and Programme)*
 - Changing political administration locally (Project)
 - Programme management and governance (Project)*
 - Political approval and project decisions (Project and Programme)*
 - Ecological implications - SAC River Wye, white clawed cray fish (Environmental)*
 - Impact of setting of listed buildings/parks and gardens (Environmental)
 - Impact on Special wildlife site (Environmental)
 - Property Blight (Cost)
 - Consent of statutory undertakers (Programme)
 - Delivery of development - premature or delayed (Commercial)
 - Redistribution of traffic as a result of phased approach (Safety)
 - Connection of successive phases – design (Project)
 - Impact on local business – golf course (Cost)
 - Timing and availability of public funding (Programme)*
 - Council staff resources (Project and Programme)*

Strategic Outline Case (SOC) Proforma

- Connections to existing roads (Costs)
- These risks have been assessed against a RAG Red Amber Green) scoring mechanism using the @RISK programme. The risk is assigned a risk owner to be reviewed at the Project Control Group meetings.

Deliverability

- The scheme is expected to be delivered using well understood methods of construction.
- The overall package has sub elements that can be delivered quickly, such as the online improvements, subject to approvals.

MC2 – Legal Powers and Consents

Legal Powers

- The Project Control Group is currently exploring the preferred method of implementing the scheme. A report has been commissioned for receipt in March 2014.

Environmental Consents

- The project team will investigate the consents required pending detailed design and timeframe at Outline Business Case.

MC3 – Governance

Governance Structure

- The scheme has the support of Herefordshire Council through investigation and delivery. There is a Project Board set up specifically to deal with Transport of which the SWTP is key. The Project Board consists of:

| South Wye Transport Package Project Board | | |
|---|--|-----------------------|
| Name | Job Title | Organisation |
| Yvonne Coleman | Planning Obligations Manager | Herefordshire Council |
| Kevin Singleton | Team Leader Strategic Planning | Herefordshire Council |
| Geoff Hughes | Director for Economy Communities and Corporate | Herefordshire Council |
| Mairead Lane | Construction Manager | Herefordshire Council |
| Steve Burgess | Head of Transportation and Access | Herefordshire Council |
| Nick Webster | Economic Development Manager | Herefordshire Council |
| Andrew Ahscroft | Assistant Director Economic, Environment and Cultural Services | Herefordshire Council |
| Jeremy Callard | Team Leader Transport Strategy | Herefordshire Council |
| Naomi Adams | Asset Manager | Highways Agency |
| Paul Hillman | Project Manager | Highways Agency |
| Andrew Stoneman | Technical Director | Parsons Brinckerhoff |
| Ben Pritchard | Associate | Parsons Brinckerhoff |

- This group brings together key senior officers from HC with Highways Agency nominated representatives and consultants. This Project Board provides an elevated decision making group for the Project Control Group.

Strategic Outline Case (SOC) Proforma

| South Wye Transport Package Project Control Group | |
|--|---------------------------------------|
| Client Team | |
| <i>Construction Manager</i> | <i>Team Leader Transport Strategy</i> |
| Mairead Lane | Jeremy Callard |
| Delivery Team | |
| <i>Project Manager</i> | <i>Project Director</i> |
| Ben Pritchard | Russell Bennett |
| <i>Highways Advisor</i> | <i>Specialist Advisor</i> |
| Chris Jones | Andy Walford |

Roles and Responsibilities

- The key roles and responsibilities are summarised below:
 - The Senior Responsible Owner (SRO) will provide a key link between the Cabinet Member, Project Board and Project Team. The SRO is responsible for overall delivery of the SWTP.
 - The Project Board will receive regular updates on the project and advise the project team of changes in political
 - The day to day Project Manager (PM) will focus on delivery of the programme with particular focus on managing the technical team. The PM will work with the SRO to deliver each component of the delivery programme.
 - The technical team will be responsible for delivering specific work packages contributing to the overall project delivery.
 - Key stakeholder will feed back into the project team and project board through those channels identified in the Communications Plan.

MC4 – Benefits Realisation

- *Please set out a brief Benefits Realisation Strategy which summarises:*
 - *What will happen.*
Most of the scheme benefits will occur as the Southern Link Road component is delivered. This infrastructure will provide additional capacity in the highway network decongesting the A465 and unlocking the economic potential of HEZ.
 - *Who will be responsible for delivery of the benefits?*
The programme board will be responsible for securing the benefits and keeping stakeholders informed of progress towards delivering its major components.
As the Southern Link Road is completed and open to traffic, the programme board will initiate projects that realise benefits such as the release of highway capacity on the existing network for public transport, cycling and walking infrastructure, projects that protect the benefits such as parking strategies to maintain low levels of congestion and projects that secure the economic benefits such as developing residential and employment land.
 - *Where it will happen.*

The benefits will happen in Southern Hereford especially Belmont, Bullingham and the HEZ.

- *When the benefits will occur*

As soon as the Southern Link Road and other complementary measures are open to traffic, commencing in 2018 and continuing throughout the scheme programme to 2022. Within assessment work, the scheme benefits are anticipated to increase with additional economic activity for at least 15 years.

MC5 – Monitoring and Evaluation Strategy

Monitoring and Evaluation

- The key beneficial outcomes of the package are primarily reduced travel times for traffic which can bypass the congested A49/A465 junction; the local townscape in Belmont as traffic is being removed providing the ability to deliver public transport, walk and cycle infrastructure to increase uptake; and the release of development land for housing and employment. The MEP will measure each of these using travel time surveys and comparing these to 2012 data and model projections; measure the delivery of infrastructure and monitor the delivery of development land by reviewing planning applications and the delivery rate of houses and employment land.
- The intervention logic for the package, and its primary scheme, is founded on the resistance to development from statutory stakeholders due to the lack of capacity in the transport system.
- Pre-scheme data has been collected for the development of the Hereford Multi-Modal Model and includes information on traffic flows, journey times and congestion. Collecting similar data will continue in the period of the scheme development. The post scheme data will similarly consider traffic performance metrics.
- Lessons learnt will be captured during the project through processes explained in the project governance section.

APPENDIX A – Appraisal Summary Table for Economic Case

This table below summarises the basic questions and issues that the Appraisal Summary Report (ASR) for the Economic Case should cover, with the potentially relevant WebTAG units highlighted. In order to assist with understanding the potential scheme impacts, more detail on each of the AST categories and sub-objectives can be found in units 3.1 to 3.19 of the WebTAG guidance: <http://www.dft.gov.uk/webtag/documents/expert/index.php>

| AST Category (and WebTAG Units) | Questions / Issues |
|---|--|
| Economy (3.1, 3.2, 3.5, 3.15, 3.18) | <ul style="list-style-type: none"> • What are the likely sources of journey time impacts that the scheme will deliver for business users and transport providers? • What is the modelling package to be used? • How will future demand for business use be forecast? • What are the reliability impacts of the scheme on business users and public transport services? • What are the impacts on any regeneration areas? • What are the wider impacts on the economy? |
| Environment (3.3) | <ul style="list-style-type: none"> • Will the scheme affect noise to local receptors as a result of changes to the transport network and levels of demand? • Is the scheme located within, or will it affect, a designated Air Quality Management Area (AQMA)? • Will the scheme construction and / or operation result in a significant change in greenhouse gas emissions? • What are the impacts on the physical and cultural characteristics of the local area and does the scheme affect any designated areas of landscape value? • Are there any impacts on the setting of buildings, structures and open spaces in urban areas which are of high value (in terms of visual appearance and usage by people)? • What are the impacts on historic resources – such as Scheduled Ancient Monuments and areas of high archaeological value? • Will the scheme affect the habitats of protected flora and fauna and impact on wildlife corridors? • Will there be a risk of water contamination and / or an increased risk of flooding as a result of the scheme? |
| Social (3.1, 3.2, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.15, 3.17, 3.18) | <ul style="list-style-type: none"> • What are the likely sources of journey time impacts that the scheme will deliver for commuters? • What is the modelling package to be used? • How will future demand for commuting be forecast? • What are the reliability impacts of the scheme on commuters? • Will the scheme lead to an increase in active travel – in particular walking and cycling? |

Strategic Outline Case (SOC) Proforma

| AST Category (and WebTAG Units) | Questions / Issues |
|---|--|
| | <ul style="list-style-type: none"> • Is there likely to be a significant change in journey quality as a result of the scheme? |
| | <ul style="list-style-type: none"> • Will the scheme have any impact on highway safety – in particular predicted numbers of accidents? |
| | <ul style="list-style-type: none"> • Will the scheme have a positive impact on crime or the fear of crime? |
| | <ul style="list-style-type: none"> • Will public transport access to services such employment, education, health care, shopping and social networks be enhanced as a result of the scheme? |
| | <ul style="list-style-type: none"> • Will the scheme change the ability of people on low incomes to afford to travel? |
| | <ul style="list-style-type: none"> • Does the scheme generate or reduce severance for pedestrians in particular? |
| | <ul style="list-style-type: none"> • Will the scheme create a facility which, for trips not yet possible or undertaken by other modes, would generate a willingness to pay over and above the expected value of any such use? |
| Public Accounts (3.1, 3.2, 3.5) | <ul style="list-style-type: none"> • What is the cost of the scheme within the broad transport budget available? |
| | <ul style="list-style-type: none"> • How will the scheme affect demand for vehicle travel and hence indirect tax revenues (for example from fuel duty)? |

The above list is not necessarily exhaustive and, depending on the nature of the scheme, should be discussed with the TOG and ITE in advance.

Strategic Outline Case (SOC) Proforma

Appendix B Draft Programme

| Hereford Transport Strategy Development and Delivery | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 | Jul-14 | Aug-14 | Sep-14 | Oct-14 | Nov-14 | Dec-14 | 01-2015 | 02-2015 | 03-2015 | 04-2015 | 01-2016 | 02-2016 | 03-2016 | 04-2016 | 01-2017 | 02-2017 | 03-2017 | 04-2017 | 01-2018 | 02-2018 | 03-2018 | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|--|--|--|--|--|--|--|
| | 2014 | | | | | | | | | | | | 2015 | | | | 2016 | | | | 2017 | | | | 2018 | | | | | | | | | | | |
| | SWTP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stage 2 preferred route/package | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stage 3 package assessment | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWTP planning application | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | |
| Full business case | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | |
| Package funding | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | |
| SWTP CPU | | | | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | |
| Detailed design | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | |
| Procurement | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | | | | | | | | | | |
| SWTP Constuction | | | | | | | | | | | | | | | | | | | | | | | | ■ | | | | | | | | | | | | |