ATKINS
Member of the SNC-Lavalin Group

Wiltshire Council

Melksham Bypass Outline Business Case

WC_MBP-ATK-GEN-XX-RP-TB-000012

Benefits Realisation, Monitoring & Evaluation Plan

11/11/21

A1

Notice

This document and its contents have been prepared and are intended solely as information for Wiltshire Council Highway Term Consultancy contract and use in relation to the Melksham Bypass OBC. Wiltshire holds no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 14 pages including the cover.

Document history

Revision	Suitability	Purpose description	Originated	Checked	Reviewed	Authorised	Date
C01	A1	Final draft	**NW**	SP	**NW**	**AM**	**11**/11/21

Contents

Chapter		Page
1.	**Introduction**	**4**
2.	**Benefits Realisation Plan**	**4**
2.1.	Logic mapping for the A350 Melksham Bypass scheme	4
2.2.	Expected benefits	6
2.3.	Benefit measurement methods	6
2.4.	Baseline data requirements	7
2.5.	Establishing targets	7
2.6.	Responsibilities and resources	7
3.	**Monitoring and Evaluation Plan**	**11**
3.1.	Introduction	11
3.2.	Pre-Construction Study (Stage 1)	11
3.3.	Process Evaluation (Stage 2)	12
3.4.	Impact Evaluation Study (Stages 2 to 3)	12
3.5.	Economic Evaluation (post Stage 3)	13
4.	**Delivery schedule**	**13**

Tables

Table 2-1 - Benefits Realisation Plan – desired outputs / outcomes and associated impacts 6

Table 2-2 – Benefit assessment indicators 8

Table 4-1 - Benefits realisation, monitoring and evaluation delivery schedule 13

Figures

Figure 1-1 - A350 Melksham Bypass Logic Map 5

Figure 3-1 – Components of monitoring and evaluation 11

1. Introduction

This document sets out the 'Benefits Realisation Plan' and 'Monitoring and Evaluation Plan' for the proposed A350 Melksham Bypass scheme, as promoted by Wiltshire Council. It is prepared in support of the Outline Business Case (OBC) and reflects the current stage of project development. The Plan will need to be kept under review and updated accordingly as the project develops.

The Benefits Realisation Plan serves as a key element in understanding the success of the scheme. It identifies the potential benefits and the way in which these benefits will be planned for, tracked and realised through scheme implementation.

The Monitoring and Evaluation Plan provides a review of the realisation of benefits. It identifies more broadly how actual scheme delivery, including wider scheme impacts, construction and budget management, are to be evaluated.

2. Benefits Realisation Plan

The Benefits Realisation Plan is designed to enable benefits that are expected to be derived from the scheme to be planned for, tracked and realised. The plan then details the key activities that are required to manage the successful realisation of these benefits - what needs to be done, when and by whom.

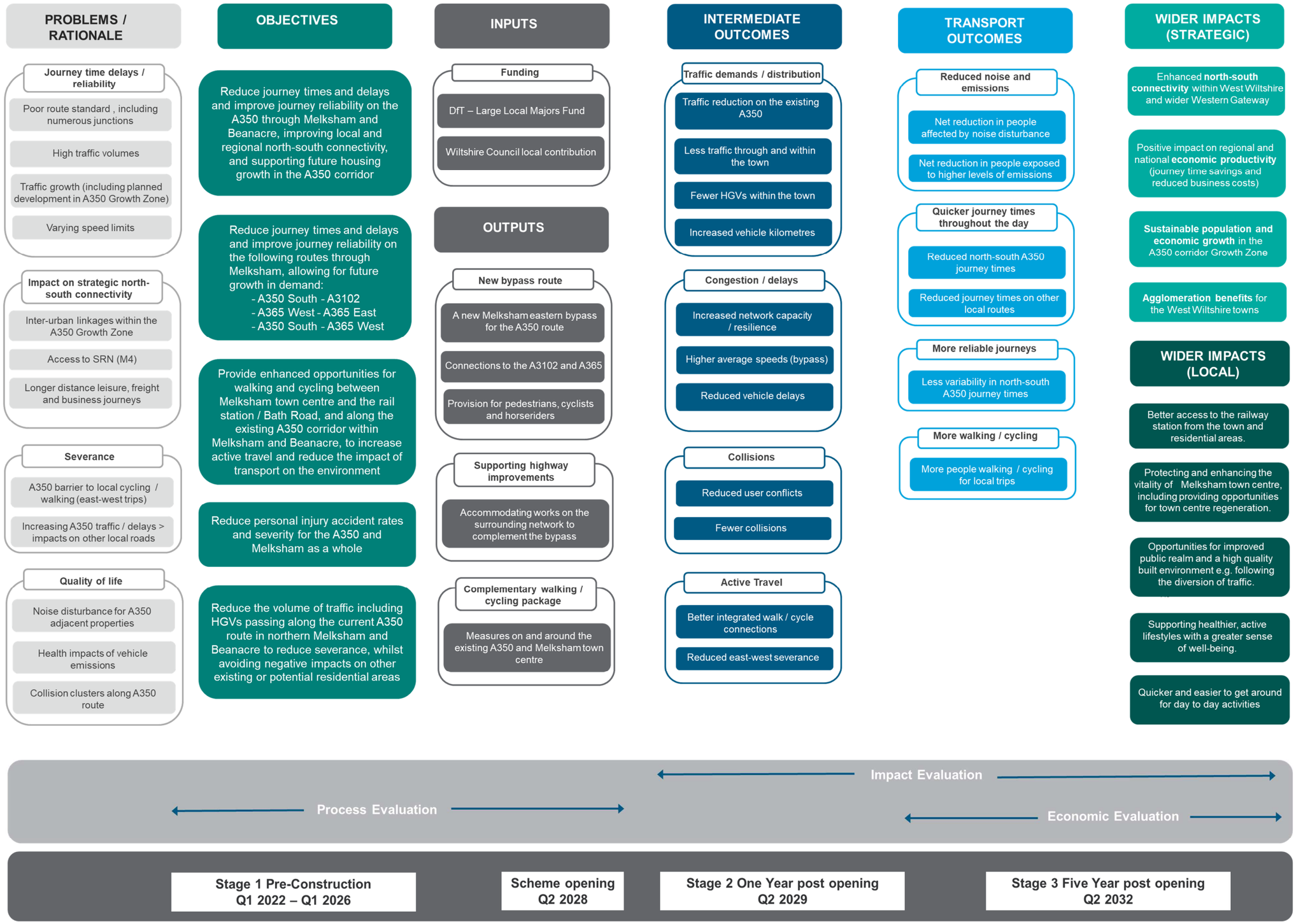
This section of the document:

- Summarises the scheme objectives and associated expected outcomes;
- Outlines the benefit measurement methods and associated data requirements; and
- Outlines the responsibilities and resources required to oversee the Plan.

2.1. Logic mapping for the A350 Melksham Bypass scheme

Logic mapping is a key tool in facilitating an understanding of benefits realisation. The Logic Map **(Figure 2-1)** breaks down the whole lifecycle of the scheme in terms of its objectives / rationale, inputs, outputs, outcomes and impacts.

Figure 2-1 - A350 Melksham Bypass Logic Map



2.2. Expected benefits

Based on the logic mapping, the desired 'outputs' and 'outcomes' for the scheme have been identified – the actual benefits that are expected to be derived from the scheme, in terms of:

- *Desired outputs* – tangible effects that are funded and produced directly as a result of the scheme; and/or
- *Desired outcomes* – final impacts brought about by the scheme in the short, medium and long term.

The scheme's objectives and desired outputs / outcomes are summarised in **Table 2-1** and provide the starting point for the development of the Benefits Realisation Plan.

Table 2-1 - Benefits Realisation Plan – desired outputs / outcomes and associated impacts

Desired outputs	Desired outcomes	Associated impacts
• A new Melksham eastern bypass for the A350 route. • Safe and convenient provision for pedestrians, cyclists and horseriders. • Accommodating works on the surrounding network to complement the bypass. • Complementary walking and cycling measures on and around the existing A350 and Melksham town centre. • Incorporation of appropriate environmental mitigation	• Reduced journey times and delays: - A350 South – A350 north - A350 South - A3102 - A365 West - A365 East - A350 South - A365 West • Improved journey reliability (less day to day variability in journey times). • Reduced severance impacts (particularly on the main A350 route through northern Melksham and Beanacre). • Reduce collision rates and severity • Increased levels of local walking and cycling activity. • Lower levels of noise disturbance. • Improved local air quality.	• Enhanced north-south connectivity within West Wiltshire and wider Western Gateway. • Positive impact on regional and national economic productivity (journey time savings and reduced business costs). • Sustainable population and economic growth in the A350 corridor Growth Zone. • Agglomeration benefits for the West Wiltshire towns. • Better access to the railway station from the town and residential areas. • Protecting and enhancing the vitality of Melksham town centre, including providing opportunities for town centre regeneration. • Opportunities for improved public realm and a high-quality built environment e.g. following the diversion of traffic. • Supporting healthier, active lifestyles with a greater sense of well-being. • Quicker and easier to get around for day-to-day activities.

2.3. Benefit measurement methods

To determine whether the scheme benefits are being realised, the desired outputs and outcomes will need to be converted into measurable indicators of scheme benefits. Benefits will need to be classified as 'quantitative' or 'qualitative' **(Table 2-2)**. Quantitative benefits are those which can be measured in specific numerical values on a continuous scale, whether in absolute or percentage terms, whereas qualitative benefits are measured in category-based or descriptive terms. Associated Impacts can be more difficult to attribute directly to the scheme and are more likely to involve reference to wider performance or monitoring mechanisms (beyond the scheme level) to facilitate a qualitative assessment around the contribution of the scheme towards supporting these impacts. The use of focus groups (before and after scheme delivery) can be one method to try to capture the perceived effect of the scheme on such impacts.

2.4. Baseline data requirements

Baseline data (or 'before' data), which will allow the pre-scheme opening situation to be quantified, is required for benefit assessment indicators #06 to #11 identified in **Table 2-2**. Sources of data currently identified are considered to be most likely, but will need to be kept under review and confirmed closer to the time to ensure that they remain the most relevant, robust, and practical data sources. Data is to be collected during the pre-construction stage (see section 3) and will need to take into account any key factors which may influence the baseline data (particularly if this is considered to impact on how representative the data is of 'normal' conditions).

2.5. Establishing targets

Where relevant, targets will be established for measurable indicators. At this stage, initial indicative targets have been identified which reflect the scale of impact expected based upon the technical analysis and assessment undertaken for the OBC. These should be kept under review as the scheme progresses.

2.6. Responsibilities and resources

The Wiltshire Council Project Manager will be the owner, responsible for tracking the benefits being realised and for reporting any exceptions to the Project Board. This will allow early identification of any particular areas where benefits are not being realised as expected. The Project Board will then appoint someone with sufficient expertise to oversee remedial actions to try and bring benefits back in line with expectations.

Table 2-2 – Benefit assessment indicators

Reference	Benefit (Desired Output / Outcome)	Benefit Indicator	Target	Type	Specific Data Requirement	Owner
Desired Outputs						
01	A new Melksham eastern bypass for the A350 route, including safe and convenient provision for pedestrians, cyclists and horseriders.	Delivery against planned scope / design. Delivery against planned timescales. Delivery against planned budget.	Deliver to agreed specifications / budget / time.	Qualitative / quantitative	Project finances Project scope Project programme	WC
03	Accommodating works on the surrounding network to complement the bypass.	Delivery against planned scope / design. Delivery against planned timescales. Delivery against planned budget	Deliver to agreed specifications / budget / time.	Qualitative / quantitative	Project finances Project scope Project programme	WC
04	Complementary walking and cycling measures on and around the existing A350 and Melksham town centre.	Delivery against planned scope / design. Delivery against planned timescales. Delivery against planned budget	Deliver to agreed specifications / budget / time.	Qualitative / quantitative	Project finances Project scope Project programme	WC
05	Incorporation of appropriate environmental mitigation	Delivery against planned scope / design. Delivery against planned timescales. Delivery against planned budget	Deliver to agreed specifications / budget / time.	Qualitative / quantitative	Project finances Project scope Project programme	WC
Desired Outcomes						
06	Reduced journey times and delays. - A350 South – A350 north	Average AM / PM peak journey times (Lacock – Semington)	*20% to 30% reduction**	Quantitative	TomTom data	WC
		Average Inter-peak journey times (Lacock – Semington)	*10% to 20% reduction**	Quantitative	TomTom data	WC

Reference	Benefit (Desired Output / Outcome)	Benefit Indicator	Target	Type	Specific Data Requirement	Owner
07	Reduced journey times and delays. - A350 South - A3102 - A365 West - A365 East - A350 South - A365 West	Average AM / PM peak journey times	*10% reduction**	Quantitative	TomTom data	WC
		Average Inter-peak journey times	*10% reduction**	Quantitative	TomTom Data	WC
08	Improved journey reliability (less day to day variability in journey times).	Standard deviation of AM / PM peak journey times on the A350 between Lacock and Semington	*Measurable reduction**	Quantitative	TomTom Data	WC
09	Reduced severance impacts (particularly on the main A350 route through northern Melksham and Beanacre).	12-hour Annual Average Daily Traffic (all vehicles) on the existing A350 route at: - northern Melksham and Beanacre - Farmers Roundabout - A350 Semington Bypass	*30% to 50% reduction**	Quantitative	Automatic traffic counts (AADT)	WC
		12-hour Annual Average Daily Traffic (HGVs) on the existing A350 route in northern Melksham and Beanacre	*50% to 60% reduction**	Quantitative	Automatic traffic counts (AADT)	WC
		12-hour Annual Average Daily Traffic (all vehicles) on other residential roads in Melksham (Semington Road / King Street, Spa Road (north of Snowberry Lane), Lowbourne / Sandridge Road)	*<10% increase**	Quantitative	Automatic traffic counts (AADT)	WC
10	Reduce collision rates and severity	Personal injury accident rates on A350 between Lacock and Semington with lower average severity	*20% to 30% reduction**	Quantitative	STATS19 collision data	WC

Reference	Benefit (Desired Output / Outcome)	Benefit Indicator	Target	Type	Specific Data Requirement	Owner
		Personal injury accident rates for Melksham overall, with lower average severity	*10% reduction**	Quantitative	STATS19 collision data	WC
11	Increased levels of local walking and cycling activity.	Walking and cycling journeys between town centre and rail station / Bath Road	*20% to 30% increase**	Quantitative	Pedestrian / cycle counts	WC
		Walking and cycling journeys along the existing A350 corridor (between Bath Road and Leekes)	*20% to 30% increase**	Quantitative	Pedestrian / cycle counts	WC

*Targets are indicative and will need to be kept under review as the project develops.

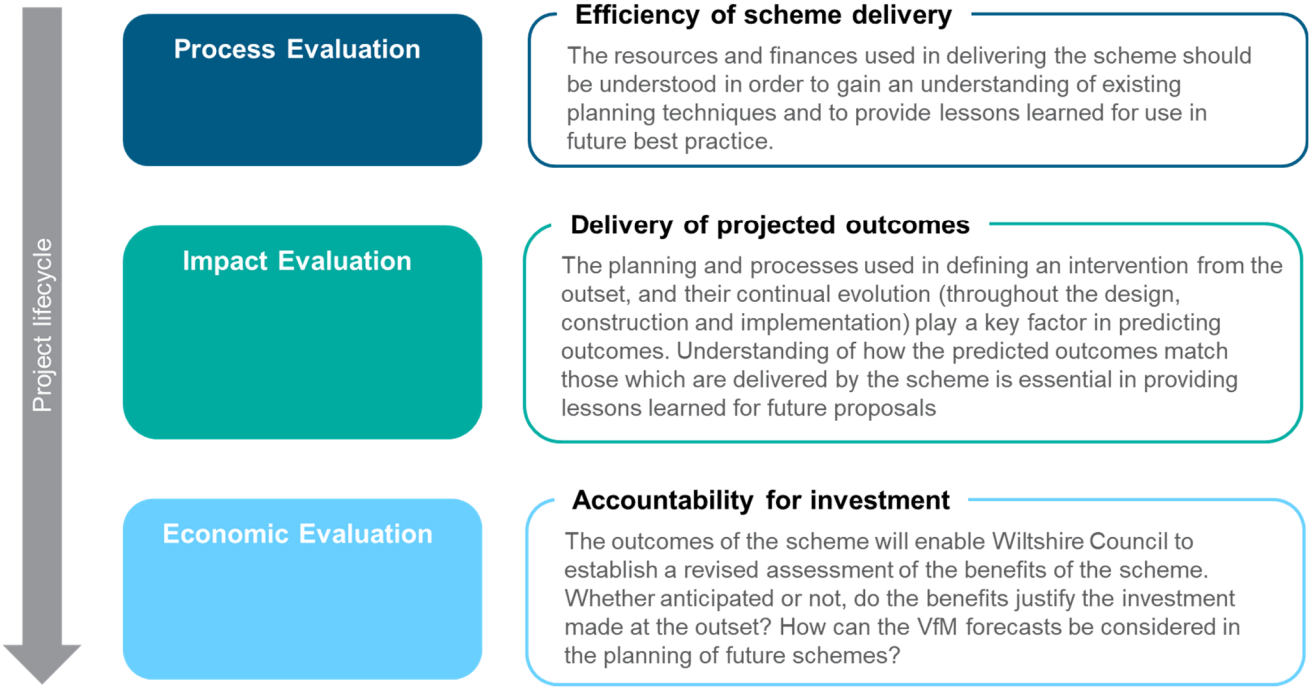
3. Monitoring and Evaluation Plan

3.1. Introduction

The purpose of the Monitoring and Evaluation Plan is to identify how actual scheme delivery, including wider scheme impacts, construction and budget management, are to be evaluated. The Monitoring and Evaluation Plan therefore has a wider remit than the Benefits Realisation Plan.

There are three key components of scheme evaluation, which broadly run sequentially in line with the project lifecycle **(Figure 3-1)**.

Figure 3-1 – Components of monitoring and evaluation



It is important to establish how different scheme specific objectives are realised over different timescales. Some objectives will be realised immediately or shortly after the scheme opens; such short and medium-term schemes are referred to as outcomes. Other objectives such as supporting economic growth and development are less direct and tangible effects of the scheme and are expected to take effect over a longer period; these longer-term effects are called impacts. Impacts can be more difficult to attribute directly to the scheme.

For this reason, the Scheme Monitoring and Evaluation Plan will be undertaken in three distinct stages:

- Stage 1 – Pre-Construction Study
- Stage 2 – One Year Post Opening Process Evaluation, Q2 2029
- Stage 3 – Five Year Post Opening Impact Evaluation Study, Q2 2033

These stages have been depicted on the Logic Map **(Figure 2-1)**.

A budget will be established for the monitoring and evaluation of the scheme to take place specifically, monitoring traffic volumes, delays, and collisions experienced within the study area for the A350 Melksham Bypass scheme.

3.2. Pre-Construction Study (Stage 1)

Stage 1 (Pre-Construction) involves the collection of baseline information which can be used in the evaluation of impacts in the later stages (i.e. those data sources indicatively identified in **Table 2-2**).

Electronic copies of all reports, documents, data and models relating to the scheme appraisal that will be required to establish baseline conditions and forecast impacts in terms of collisions, traffic volumes and journey times will be collated.

3.3. Process Evaluation (Stage 2)

The Process Evaluation will be undertaken as the construction nears completion through to the Stage 2 One Year Post Opening Process Evaluation.

The aim of the process evaluation is to identify factors influencing the extent to which objectives have been achieved, identify and investigate unintended outcomes, and identify lessons learned.

The process evaluation will extend beyond a desk-based study and will involve interviews with key project officers together with a process review workshop with key parties (e.g., Wiltshire Council) and stakeholders. This will include an assessment of:

- Programme management, success factors and key obstacles to delivering the scheme. Provide details of project plan assessment, delivery at key milestones, etc. This will help identify good practice in this area, which can be shared in the future.
- A review of evidence collated through Wiltshire Council's project management and governance procedures.
- Consultation with key stakeholders to garner a range of views of the operation and success of the scheme.
- The evolution of the risk register and the effectiveness of the risk management strategy e.g., safety during construction, delay to transport users, impacts on local business during construction.
- If and how the context and rationale behind the scheme has changed
- Identify any changes to the delivered scheme from the planned scheme and the reasons behind any changes. This can be used to identify good practice
- Assess how well scheme objectives are being realised at this stage
- All costs involved in the management, construction and delivery of the scheme are compared with the forecast costs including an assessment of risk and optimism bias in pricing

3.4. Impact Evaluation Study (Stages 2 to 3)

3.4.1. Scheme impacts

The evaluation of impacts will be undertaken using a standard knowledge-based theory of change approach and designed so that the unique contribution of the A350 Melksham Bypass scheme can be established, and so that the approaches and methods are commensurate with the scheme scale. This approach has been adopted as it will allow:

- The evaluation of specific interventions
- The ability to derive casual based effects of the interventions
- An opportunity for continual forecasting of impacts

Following the collection of baseline information at Stage 1 (Pre-Construction), the impact evaluation will be updated through the following steps in Stages 2 and 3:

- Request and process personal injury collision data for period beginning five years prior to the start of construction and finishing five years after opening, compare collision and casualty numbers allowing for a robust assessment of safety impacts
- Comparison of traffic flows on the A350 and the new bypass (using traffic count data collected by Wiltshire Council and with the DfT)
- Compare Stage 1 baseline data to post opening data to determine scheme impacts
- An evaluation of the scheme in terms of the outturn impacts on economic development and growth (Stage 3 only)
- Obtain and analyse local socio-economic and economic metrics such as employment data and housing volumes to establish any correlation between the delivery of the scheme and improvements in local economic conditions (Stage 3 only).

3.4.2. Unexpected Impacts

Any impacts that were not expected or planned for as part of the scheme should be identified in the Impact Evaluation Study.

3.5. Economic Evaluation (post Stage 3)

After the completion of the Stage 3 monitoring and impact evaluation, an economic evaluation will be undertaken to assess the accountability of the investment into the scheme through answering the following questions:

- How do realised benefits, and therefore, VfM correspond with those assumptions derived from the scheme appraisal?
- Have any unexpected benefits occurred or have other predicted benefits not materialised?
- Are on-going benefits expected to change?

The actual outturn costs and movement data will be used to generate a new BCR to understand the Value for Money provided. This will be compared back to that generated within the original Business Case.

4. Delivery schedule

Benefits realisation, monitoring and evaluation will be an ongoing process throughout the Scheme implementation and will continue once the scheme has been delivered. **Table 4-1** shows the current expected timescales based on the prevailing delivery programme.

Table 4-1 - Benefits realisation, monitoring and evaluation delivery schedule

Task	Timescale
Pre-Construction	
Collect baseline data	2025
Benefits Realisation, Monitoring and Evaluation Plan submitted	Q2 2025
During Construction	
Data assembly for process evaluation	2028
Post-Construction	
Data assembly for impact evaluation study (Y1)	Q1/Q2 2029
Interim evaluation (Y1) technical note	Q3 2029
Data assembly for impact evaluation study (Y5)	Q1/Q2 2033
Impact evaluation study (Y5) technical note	Q3 2033

3rd Floor, County Gate,
County Way, Trowbridge BA14 7FJ