

Broughton Bypass

Monitoring and Evaluation Plan Draft

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1

Introduction

1.1 Background

This report sets out a Monitoring and Evaluation Plan for the proposed Broughton Bypass. The Department for Transport (DfT) is responsible for demonstrating that the funding it provides to local-level investment represents value for money for the taxpayer. It must also ensure that lessons learnt from this evidence are used to inform future decision making. The DfT approach to achieving this varies to reflect the nature and scale of the programme under consideration.

The funding of Local Authority Major Schemes constitutes a substantial investment for government. Evaluating the investment must satisfy the following objectives:

- *Provide accountability for the investment;*
- *Evidence future spending decisions;*
- *Learn about which schemes deliver cost-effective transport solutions;*
- *Enhance the operational effectiveness of existing schemes or future schemes;*
- *Improve future initiatives based on learning.*

The recent National Audit Office (NAO) report on Local Authority Major Schemes highlighted the importance of evaluation for ensuring transparent and accountable decision making. The report concluded that whilst the DfT has made advances in this area, there is still scope for improvement in the coverage, quality and resourcing of evaluations.

In September 2012, the DfT released an updated framework to meet responsibilities for the evaluation of Local Authority Major Schemes, entitled “Monitoring and Evaluation Framework for Local Authority Major Schemes” (to be known as “the DfT’s guidance” throughout the remainder of this report).

The DfT’s guidance is designed to make the process as consistent and proportionate as possible. It also aims to be complementary with the devolution of decision making, developing a consistent evidence base to enable a clear demonstration that intended outcomes and impacts have been delivered effectively, and assess whether scheme objectives have been achieved. This will provide valuable evidence to support future funding of such investment streams.

A consistent monitoring approach across all Local Authority Major Schemes will also facilitate programme level analysis to be carried out by the DfT on a regular basis, enabling dissemination of good practice and lessons learnt across the investment programme.

The framework sets out:

- *The expectations for the monitoring and evaluation of Local Authority Major Schemes and engagement with DfT*
- *Standard Monitoring requirements*
- *Enhanced Monitoring requirements*
- *Fuller Evaluation requirements*
- *The schemes selected for Fuller Evaluation*
- *Monitoring and Evaluation Plan requirements*

1.2 Report Purpose

This report sets out the Monitoring and Evaluation Plan for the proposed Broughton Bypass (referenced throughout the remainder of this report as “the Scheme”).

1.3 Sources of Information

The following documents have been consulted as part of the development of the Monitoring and Evaluation Strategy:

- *Broughton Bypass Outline Scheme Business Case*;
- *Monitoring and Evaluation Framework for Local Authority Major Schemes (DfT, September 2012)*;
- *Best Practice Guidance for Planning the Fuller Evaluations of Local Authority Major Schemes (Rev0) (DfT, 2013)*;
- *HMT Magenta Book*; and
- *Logic Mapping Hints and Tips (Tavistock Institute, October 2010)*

1.4 Report Structure

The remainder of this document is structured as follows:

- *Chapter 2: Proposed Scheme*;
- *Chapter 3: Monitoring and Evaluation Requirements*;
- *Chapter 4: Logic Mapping*;
- *Chapter 5: Standard Monitoring Approach*;
- *Chapter 6: Data Collection*; and
- *Chapter 7: Governance*

2

Proposed Scheme

2.1 Proposed Scheme

The proposed Broughton Bypass is 1.9 km long and its approximate alignment is shown in **Figure 2-A**. The bypass is scheduled to open in 2017 and will have a speed limit of 40mph.

The bypass will replace the part urban/part rural single carriageway road currently passing through Broughton with a rural classified road. It will avoid the village, removing through traffic from Broughton Crossroads.

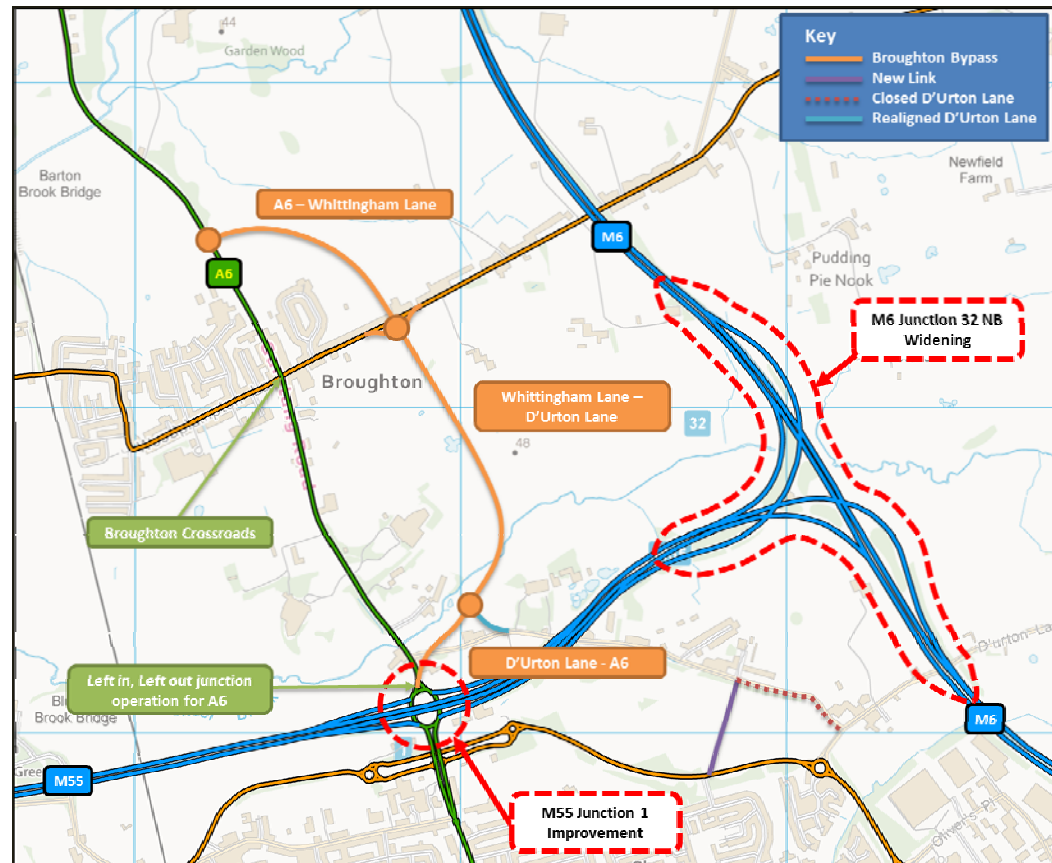
The bypass is to be constructed on the east side of the village. From north to south it can be considered to have three sections:

- From A6 Garstang Road north of Broughton to Whittingham Lane;
- From Whittingham Lane to D'Urton Lane; and
- From D'Urton Lane to A6 Garstang Road just north of M55 Junction 1

The sections between Whittingham Lane and D'Urton Lane, and D'Urton Lane and A6 Garstang Road are dual carriageway, and the remaining section to the north between Whittingham Lane and the A6 is single carriageway. Roundabout junctions are provided along the bypass with the exception of the southern tie in which is a left in left out priority junction.

D'Urton Lane has been realigned at its western end to tie in with the bypass. D'Urton Lane is also closed to vehicular traffic close to the junction with the section of D'Urton Lane that leads to Haighton Green Lane. A link will be provided from D'Urton Lane to Eastway through a proposed development site, though this link will not open until after the opening year of the bypass. The speed limit along the existing A6 through Broughton village will be reduced from 40mph to 20mph with gateway signs and reduced carriageway width for motorists. Facilities for bus users and non-motorised users will be enhanced with additional crossing points, wider footways and shared use cycle tracks and a general improvement of the public realm.

Figure 2-A: Scheme Location



2.2 Scheme Objectives

The published objectives of the proposed scheme are as follows:

- To improve the environment, particularly that of the bypassed community;
- To provide better conditions for public transportation, cyclists and pedestrians, which facilitates and encourages the increased use of transport options other than private vehicles;
- To enhance road safety;
- To assist economic growth through an efficient and sustainable transport system and maintenance of accessibility to the trunk network for the efficient transport of goods; and
- To bring additional capacity to the network and improve accessibility and journey times into and out of Preston and better connectivity to the wider strategic road network, with additional benefit to the delivery of new development and economic growth in the area.

3

Monitoring and Evaluation Requirements

3.1 Introduction

The DfT Monitoring and Evaluation Framework guidance sets out three tiers of Monitoring and Evaluation:

- *Standard Monitoring*
- *Enhanced Monitoring*
- *Fuller Evaluation*

All Local Authority Major Schemes approved for funding as part of the 'Supported Pool' in 2010, or as part of the 'Development Pool' process in late 2011 / early 2012, are required to undertake Standard Monitoring.

Those schemes that cost more than £50m, or which are anticipated to have significant impact upon particular indicators (e.g. local air quality), are required to undertake Enhanced Monitoring.

Selected schemes, as identified by the DfT, are also required to undertake a Fuller Evaluation. This consists of assessments of the delivery process, outcomes and impacts, and value for money. These schemes have been selected based on the scale of investment, the nature of the scheme and the benefits to be gained from the evaluation evidence generated.

This scheme only requires Standard Monitoring and Evaluation. The requirements for this tier are summarised below. Full details of the proposals to satisfy those requirements are set out in Chapter 5.

3.2 Inputs, Outputs, Outcomes and Impacts

Before outlining the requirements for Monitoring and Evaluation, it is worth explaining four terms that are used, namely Inputs, Outputs, Outcomes and Impacts, as described below:

- **Inputs:** What is being invested in terms of resources, equipment, skills and activities undertaken;
- **Outputs:** What has been delivered and how it is being used, such as roads built, bus services delivered;
- **Outcomes:** Short-term intermediate effects, such as changes in traffic flows, modal shifts; and
- **Impacts:** Longer-term effects on wider social and economic outcomes, such as supporting economic growth.

3.3 Standard Monitoring

Table 3-A summarises the DfT's Standard Monitoring requirements for all Local Authority Major Schemes.

Table 3-A: Standard Monitoring Requirements

Item	Stage	Data Collection Timing
Scheme Build	Input	During delivery
Delivered Scheme	Output	During delivery / post opening
Costs	Input	During delivery / post opening
Scheme Objectives	Output / Outcome / Impact	Pre or during delivery / post opening (up to 5 years)
Travel Demand	Outcome	Pre or during delivery / post opening (up to 5 years)
Travel Times and Reliability	Outcome	Pre or during delivery / post opening (up to 5 years)
Impact on the Economy	Impact	Pre or during delivery / post opening (up to 5 years)
Carbon	Impact	Pre or during delivery / post opening (up to 5 years)
Stage Inputs: What is being invested in terms of resources, equipment, skills and activities undertaken Outputs: What has been delivered and how it is being used, such as roads built, bus services delivered. Outcomes: Intermediate effects, such as changes in traffic flows, modal shifts. Impacts: Longer-term effects on wider social and economic outcomes, such as supporting economic growth).		
	Reported within 'One year after Report' (released 1 – 2 years post scheme implementation)	
	Reported within both the 'One year after Report' and 'Final Report' (~5 years after scheme implementation).	

Noise, local air quality and accidents are covered by enhanced monitoring and evaluation.

4

Logic Mapping

4.1 Introduction

In order to support the monitoring and evaluation process, scheme promoters need to clearly articulate the assumptions which underpin how the scheme will deliver the intended outcomes and impacts. The DfT Monitoring Framework guidance recommends logic mapping is undertaken by scheme promoters to present their scheme's causal pathways, whereby the chain of connections showing how a scheme is expected to achieve desired results and anticipated benefits is illustrated.

4.2 Method

Logic mapping is a systematic and visual way of presenting the key steps required in order to turn a set of resources or inputs into activities and outputs, which are, in turn, designed to lead to a specific set of changes or outcomes / impacts. The aim is to articulate the underlying causal theory based on the assumptions and evidence underpinning the rationale for the scheme.

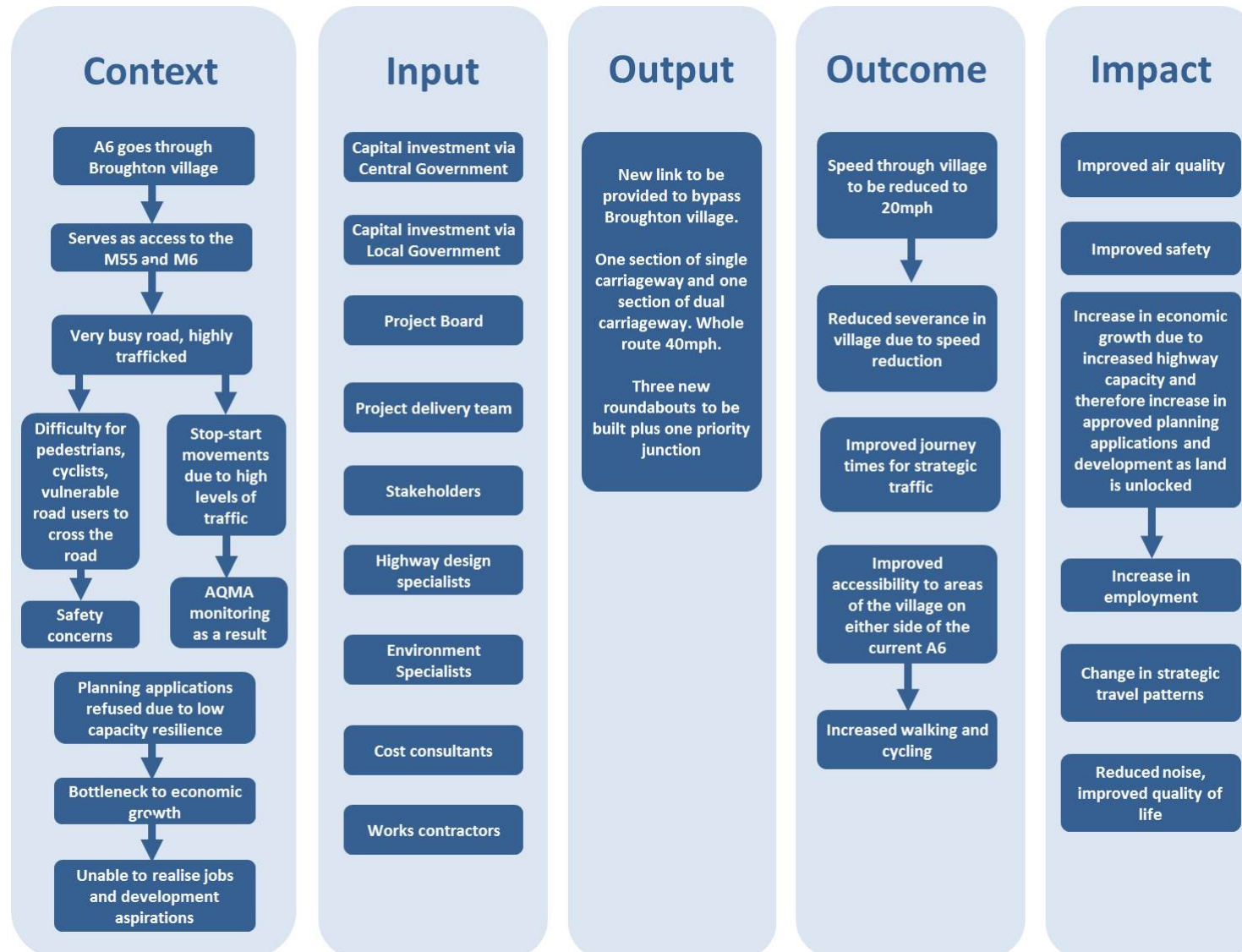
Causality is central to logic maps, as events are ordered in such a way that the presence of one event or action leads to, or causes, a subsequent event or action. Logic maps should seek to:

- *Articulate what needs to happen in order for the anticipated outcomes and impacts to be achieved;*
- *Provide a clear line of sight between the inputs and the anticipated impacts;*
- *Visualise unintended effects;*
- *Highlight gaps in the evidence base and therefore help to focus evaluation effort accordingly;*
- *Outline the stages between the inputs and the desired impacts, which provides a transparent assessment framework within which existing evidence and evaluation results can be combined to provide answers to the evaluation questions; and*
- *Point to where the links between the inputs, outputs, outcomes and impacts are unclear, which aids delivery as well as evaluation design.*

4.3 Logic Map

The logic map for the proposed Broughton Bypass is provided as **Figure 4-A** and will be used to aid the development of the Monitoring and Evaluation strategy for the scheme.

Figure 4-A: Logic Map



5 Standard Monitoring Approach

5.1 Introduction

This chapter details the proposed methodology and the reporting mechanisms to be adopted for Standard Monitoring. Data collection requirements and programme are discussed in Chapter 6.

The Standard Monitoring approach is discussed under the following headings:

- *Scheme Build*
- *Delivered Scheme*
- *Scheme Costs*
- *Scheme Objectives*
- *Travel Demand*
- *Travel Times and Reliability*
- *Impact upon the Economy*
- *Carbon*

An Evaluation Manager will be responsible for the overall coordination and management of the Monitoring and Evaluation process. They will not be involved in the day to day scheme delivery, but will be a visible member of the team who is able to objectively assess the various elements of the Monitoring and Evaluation metrics.

Further details of the Evaluation Manager's role are discussed in section 7.3. The nominated Evaluation Manager should be someone who is familiar with the scheme with an understanding of the data collection methodology. They will ensure quality assurance procedures are implemented throughout the evaluation programme.

5.2 Scheme Build

Monitoring of the Scheme Build process will form a key component of the ongoing delivery of the Scheme. The evaluation of the Scheme Build will be published within the 'One Year After' Report.

Key information and evidence to support a transparent evaluation of the Scheme Build process will be collected throughout the delivery process.

Table 5-A provides a summary of the key items that will be included within the evaluation of Scheme Build. Information will be documented as part of regular progress meetings (monthly), Project Board meetings (every two to three months), Cabinet papers and Gateway Reviews at key milestones.

The Project Manager will be responsible for ensuring details are readily available and clearly documented for supply to the Evaluation Manager.

Table 5-A: Standard Monitoring - Scheme Build

Metric	Details
Programme	<p>The scheme delivery process will be monitored against the proposed delivery programme put forward as part of the Best and Final Funding Bid / confirmation of funding.</p> <p>Key milestones in the delivery process will be used to understand whether the Scheme Build has met expectations and details of any variances will be documented and discussed.</p>
Stakeholder management	<p>The evaluation of Stakeholder management will focus upon the effectiveness of engagement. Both statutory bodies and non-statutory stakeholders, such as the public and local employers, will be asked for their views on whether the engagement was thorough, open, at the right times etc..</p> <p>Details of Stakeholder engagement undertaken during the delivery process will be published along with key findings. This will be used to inform potential lessons learned from effective consultation and to clearly demonstrate its value.</p>
Risk management	<p>The effectiveness of the risk management process will be evaluated at key stages in the delivery process e.g. planning, funding / business case submissions, procurement, Gateway Reviews and during construction.</p> <p>It will consider the following:</p> <ul style="list-style-type: none"> • Were all risks identified in the early stages of scheme development? • If new risks became apparent during the course of scheme development or delivery, could they have been reasonably foreseen? • How were risks managed during scheme development and delivery? Were actions clearly recorded? Were actions taken by the nominated person responsible? • Was the reporting of risks open and transparent? • What worked well and what are the lessons learnt for other schemes? <p>This will be used to inform the overall impact of risk upon the delivery process, the appropriateness of risk assumptions within the scheme cost estimates and use of Optimism Bias uplift within the scheme appraisal.</p>
Scheme benefits	<p>A comparison will be made between the scheme, as it was originally proposed at Programme Entry, versus that which evolved during the Scheme Build process. This will identify whether, for example, de-scoping has occurred to keep within budgets, resulting in some beneficiaries losing out.</p>

5.3 Delivered Scheme

Details of the delivered scheme will be provided within the 'One Year After' Report. This will provide a detailed comparison of the proposed scheme at funding approval, detailed design and the delivered scheme.

The design team will work alongside the construction team to identify and document the outturn deliverables against the planned deliverables.

The Project Manager will be responsible for ensuring details are readily available and clearly documented for supply to the Evaluation Manager.

Table 5-B provides a summary of the key items that will be included within the evaluation of the Delivered Scheme.

Table 5-B: Standard Monitoring - Delivered Scheme

Metric	Details
Implemented scheme	<p>The following information will be documented:</p> <ul style="list-style-type: none"> • Full description of implemented scheme • Plans of the delivered scheme • Plans of individual elements as required
Changes	<p>Identification of any changes to the scheme since funding approval. For example, changes to route and/or design of the scheme and details of the reasons for any such changes.</p>
Intended beneficiaries	<p>A qualitative assessment of whether the scheme has reached the intended beneficiaries e.g. road users, pedestrians, cyclists, and both developers and residents.</p>
Mitigation	<p>Identification of changes to mitigation measures (e.g. on landscape, noise mitigation etc.) with a clear description of the changes and the reasons for implementation (or non-implementation).</p>

5.4 Scheme Costs

A detailed account of the scheme costs will be provided within the 'One Year After' Report and Final Report. This will provide a detailed comparison of the cost estimates at funding approval, the detailed design, the outturn values upon delivery of the scheme, and of maintenance costs, 4-5 years after scheme opening.

The design team and the cost consultants will work alongside the construction team to identify and document the outturn costs against the cost estimates.

The Project Manager will be responsible for ensuring details are readily available and clearly documented for supply to the Evaluation Manager.

Table 5-C provides a summary of the key items that will be included within the evaluation of the Scheme costs.

Table 5-C: Standard Monitoring - Scheme Costs

Metric	Details
Outturn costs	Outturn investment costs broken down into key elements as put forward for the Major Scheme funding bid.
Risk	Details of the manifestation of identified risks within each element of the scheme cost estimate.
Savings	Identification of those cost elements with savings, and identification of the reasons for those cost savings.
Overruns	Analysis of those cost elements with overruns, and identification of the reasons for those cost overruns.
Maintenance costs	Comparison of outturn maintenance or other capital costs with those forecast, analysis of any variations from forecast and any unanticipated costs identified.

5.5 Scheme Objectives

DfT guidance suggests that up to three main objectives of the scheme should be evaluated against appropriate metrics to enable an assessment to be made of how scheme objectives have been realised.

The scheme objectives to be evaluated are;

Objective 1 To provide better conditions for public transportation, cyclists and pedestrians, which facilitates and encourages the increased use of transport options, other than private vehicles

Objective 2 To enhance road safety

Objective 3 To bring additional capacity to the network and improve accessibility and journey times into and out of Preston.

The recommended evaluation approach for each of the scheme objectives is outlined below. The LCC Project Manager will be responsible for ensuring details are readily available and clearly documented for supply to the nominated Evaluation Manager.

The evaluation of the objectives will be presented within both the 'One Year After' Report and the Final Report.

5.5.1 Objective 1:

This will be monitored through pedestrian and cyclist counts, before and after the scheme opens, recording both the volumes using footways and crossing points. The type of pedestrian will also be monitored, to record increases in elderly, disabled or mobility restrained users who may feel safer or more confident crossing a road with slower traffic. Bus patronage could be monitored before and after the scheme opens, however this data is unlikely to be made available directly from the various bus companies, and rather a live count at bus stops may be undertaken.

5.5.2 Objective 2:

Improving local road safety can be measured both from a decrease in the number of collisions but also by reducing the severity. Road safety trends are evaluated over several years of data, and so this objective will need to be monitored annually.

5.5.3 Objective 3:

Improving accessibility can be evaluated quantitatively through the analysis of journey time surveys. The Scheme is intended to reduce journey times for traffic currently travelling along the A6 through the village. The bypass will allow for increased speeds and fewer stop-start movements. Traffic volumes on the existing A6 should decrease.

Table 5-D provides a summary of the metrics that will be considered.

Table 5-D: Standard Monitoring - Objective 3

Metric	Details
Journey Times	<p>Journey time data is collected for both the current route through Broughton before construction, and for both the existing A6 and the new bypass post opening. A comparison of data will indicate whether the bypass has improved journey times for those travelling past the village.</p> <p>This data will be collected as part of the Travel Demand and Travel Reliability metrics.</p>
Accessibility	<p>This will be monitored by using pedestrian and cyclist counts to evaluate any increase in NMU movements. The type of pedestrian can also be analysed i.e. are more wheelchair and mobility impaired people accessing Broughton.</p>
Capacity	<p>Capacity of both the old network and the new road will be evaluated by recording traffic volumes. This will be undertaken by using ATC count data, and comparing the current information with that collected post opening of the scheme.</p> <p>This data will be collected as part of the Travel Demand metric.</p>

5.6 Travel Demand

Travel demand information will be collected on key corridors of travel that are affected by the scheme. This data will be used to inform an assessment of the impact upon travel patterns within the area.

The evaluation of the travel demand metrics will be provided within both the 'One Year After' Report and the Final Report.

Daily weekday traffic flows (AM (0700-1000), PM (1600-1900) and 12-hour flows) for a neutral month (April, May, June, September, October or November) for all locations will be monitored using permanent Automatic Traffic Counters (ATCs) and temporary ATCs to give at least two weeks of data. Weekend 12-hour flows will also be monitored for Saturdays and Sundays for the same neutral month.

Data will be collected for the baseline conditions (pre-opening), the settling down period post-construction (within 1 year of opening) and the longer-term impact (4 to 5 years after opening).

Pedestrian and cycle counts will also be undertaken for a two week period, over 24 hours, on the current A6 at various key locations including crossing points, for a typical weekday within the same survey month as the ATCs and for the same time periods i.e. AM (0700-1000), PM (1600-1900) and 12-hours. Counts will also be undertaken on a typical Saturday within the same neutral month.

The Team Leader for the Travel Demand Data Collection will be responsible for ensuring the above data is readily available and clearly documented for supply to the Evaluation Manager.

5.7 Travel Time and Reliability

Travel times and reliability will form a key measure of the success of the scheme in relieving existing routes and improving access to the M55 and M6.

Journey times and journey time reliability will be analysed using data obtained from user-observer surveys and can be verified using TrafficMaster plc. Data will be collected in both directions for key routes.

Data will be collected in the same neutral month as the Travel Demand data. Analysis will be undertaken for weekday peak hours i.e. 0800-0900hrs and 1700-1800hrs for several week days (usually Tuesday to Thursday). Analysis will also be undertaken on a typical Saturday within the same neutral month for 1100-1200hrs.

Analysis will be undertaken pre-construction, within 1 year after opening and 4 to 5 years after opening.

The Team Leader for the Journey Times Data Collection will be responsible for ensuring the above data is readily available and clearly documented for supply to the Evaluation Manager.

The evaluation of the travel time and reliability metrics will be provided within both the 'One Year After' Report and the Final Report.

5.8 Impact on the Economy

Scheme promoters are required to monitor and report information which shows how the scheme is contributing to economic growth.

5.8.1 Reduced travel times

Within standard economic analysis, travel times are converted to monetary values through the application of Values of Time. By assessing journey time savings, journey purpose and the total number of journeys made, total journey time savings can be converted into monetary values which represent benefits to the economy. The cumulative annual travel time savings, expressed as monetary values, can then be compared to the cost of the scheme and the expected monetised benefits for Economic Efficiency as given in the Best and Final Funding Bid (BAFFB) Economic Case.

By comparing the journey time and traffic count forecasts prior to the opening of the scheme with data collected after opening, a high-level assessment can be made to determine whether the overall benefits of the scheme are as expected.

5.8.2 Access to employment

Improved access to development sites can benefit the economy by accelerating and stimulating their development, thereby creating employment at those sites.

The introduction of the Scheme will significantly improve access from the strategic highway network to a number of key areas that are important to the local economy. Growth of the rural economy through increased tourism, and of the industrial economy through the development, where there is potential for expansion, and thus increased employment, is expected to result from the Scheme. This data shall be collected by LCC teams from their planning records.

5.8.3 Summary

Evaluation of the impact on the economy will be provided within both the One Year After Report and the Final Report.

The evaluation metrics that will be employed to understand potential impacts upon economic growth are summarised in **Table 5-E**.

Table 5-E: Standard Monitoring – Impacts on the economy

Metric	Details
Implemented Scheme	Qualitative assessment of how the scheme has improved access to development sites.
Travel times	Changes in journey times will be evaluated using user-observed surveys or TrafficMaster data on various key routes for the Travel Times and Reliability metric. Data will be collected pre-construction and post-scheme opening (both within 1 year and 4 to 5 years after opening). The analysis will show which routes have seen reductions in travel times and improvements in travel time reliability.
Accessibility	Accessibility plots, in the form of 20 minute isochrones, will be derived in GIS for cars for the situations with and without the scheme.
Employment levels	The impact of the scheme upon employment levels at key development and regeneration sites will be monitored by Lancashire County Council. This will identify any changes in employment at the development sites closest to the scheme.

5.9 Carbon Impacts

Scheme promoters are required to monitor and report information which shows how the scheme has affected carbon emissions. The evaluation of the impact on Carbon will be provided within both the 'One Year After' Report and the Final Report.

Changes in the volume of traffic and their speeds affect carbon emissions. An analysis will be undertaken to identify any significant differences between outturn flows and/or speeds compared to those forecast for the scheme.

The evaluation metrics that will be employed to understand the impact of the scheme on carbon emissions are summarised in **Table 5-F**.

The Team Leader for Travel Demand Data Collection will be responsible for ensuring details are readily available and clearly documented for supply to the Evaluation Manager.

Table 5-F: Standard Monitoring – Carbon

Metric	Details
Traffic Volumes	Traffic volumes will be monitored using the ATCs for the Travel Demand metric. Data will be collected pre-construction and post-scheme opening (both within 1 year and 4 to 5 years after opening). The data will be used to determine changes in traffic patterns as a result of the scheme.
Traffic speeds	Changes in journey times will be evaluated using user-observer surveys and TrafficMaster data on the bypass and A6 for the Travel Times and Reliability metric. From this, the ratio of peak hour to free-flow speeds can be derived. Data will be collected pre-construction and post-scheme opening (both within 1 year and 4 to 5 years after opening). The analysis will show which routes and sections have seen changes in speeds.

5.10 Summary of Standard Monitoring

Table 5-G below summarises the Standard Monitoring to be undertaken.

Table 5-G: Standard Monitoring – Summary

Standard / Enhanced / Fuller	Item	Stage (Inputs / Outputs / Outcomes / Impacts)	Sub-Item
Standard	Scheme Build	Inputs	Programme
			Stakeholder management
			Risk management
			Scheme completeness
	Costs	Inputs	Outturn construction costs
			Risks
			Cost savings
			Cost over-runs
			Outturn maintenance costs
			Unanticipated costs
	Delivered Scheme	Outputs	Changes to scheme
			Intended beneficiaries
			Changes to mitigation
	Travel Demand	Outcomes	Traffic volumes (screenlines)
			Pedestrians and cyclist counts
	Scheme Objectives	Outputs, Outcomes & Impacts	Employment levels
			Accessibility
			Congestion
			Noise
			Air quality
	Travel Times and Reliability	Outcomes	Accidents
			Journey times surveys
	Economy	Impacts	Variability of journey times
			Travel times
			Accessibility
	Carbon	Impacts	Employment levels
			Traffic volumes
			Traffic speeds

6

Data Collection

6.1 Introduction

This chapter of the report sets out the data collection requirements, timescales and budgetary estimates associated with each of the evaluation metrics for the Standard Monitoring.

6.2 Data Collection Requirements

Table 6-A provides a summary of the data collection requirements for each of the evaluation metrics outlined within this document, together with an indication of when the data collection would be required within the monitoring and evaluation period.

Table 6-A: Data Collection Requirements

Metric / Data Collection	Timescale			
	Baseline	Construction	1 year post scheme opening	4-5 years post scheme opening
1. Scheme Build	✓	✓	✓	
2. Scheme Costs	✓	✓	✓	✓~*
3. Delivered Scheme	✓	✓	✓	
4. Travel Demand				
a) Traffic counts	✓		✓	✓
b) Pedestrian and cycle counts	✓		✓	✓
5. Scheme Objectives				
i) Facilitate sustainable travel				
a) Traffic counts	✓*		✓*	✓*
b) Pedestrian and cycle counts	✓		✓	✓
ii) Improve Safety				
a) Traffic counts	✓*		✓*	✓*
b) Pedestrian and cycle counts	✓*		✓*	✓*
c) Personal Injury Accident Data	✓*		✓	✓
iii) Improve accessibility and journey times				
a) Traffic counts	✓*		✓*	✓*
b) Journey time surveys	✓*		✓*	✓*
c) Journey time reliability	✓*		✓*	✓*
6. Travel Time and Reliability				
a) Journey time surveys	✓*		✓*	✓*
b) Journey time reliability	✓*		✓*	✓*
7. Impact on the Economy				
a) Employment levels	✓		✓	✓
b) Journey time surveys	✓*		✓*	✓*
c) Property/rental values	✓		✓	✓
8. Carbon				
a) Traffic counts	✓*		✓*	✓*

~ = maintenance costs only

* = uses survey data collected for other metrics

7

Governance

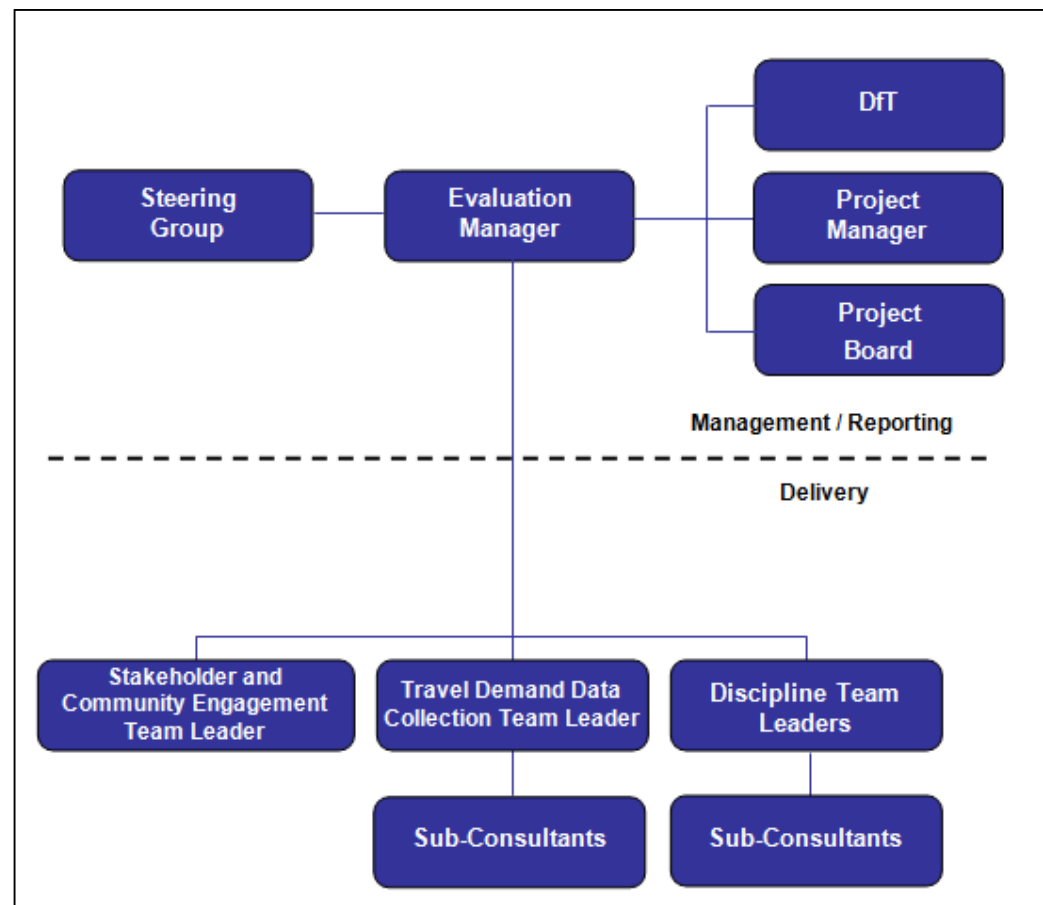
7.1 Introduction

This chapter sets out the proposed Governance arrangements to be adopted as part of the Monitoring and Evaluation strategy. It provides details of the key personnel responsible for each aspect of the scheme evaluation, the reporting lines and information dissemination.

7.2 Governance Structure

The proposed management structure for the coordination and delivery of the scheme evaluation is summarised in **Figure 7-A** with key roles discussed in more detail within the following paragraphs.

Figure 7-A: Governance



7.3 Key Personnel

7.3.1 Evaluation Manager

The Evaluation Manager will be responsible for the overall coordination and management of the Monitoring and Evaluation process and the production of relevant Evaluation Reports. The Evaluation Manager will be of an appropriate position and hold the relevant skills to be able to directly influence resources and drive the process forward. The Evaluation Manager will have knowledge of the scheme but will not be heavily involved in the process. This will ensure the avoidance of bias within the reporting procedure. In addition, they will have knowledge and appropriate experience of the appraisal and review process to ensure that the overall objectives are met.

The Evaluation Manager will also be responsible for the dissemination of the Monitoring and Evaluation information to the Project Board, the DfT and key stakeholders. Further details are discussed in Section 7.7 below.

7.3.2 Steering Group

The Steering Group for Monitoring and Evaluation will be made up of key officers within LCC, members of the project team and external consultants employed to help deliver the scheme. Additional stakeholders who have a vested interest in the scheme may also be represented within the steering group. External stakeholders are likely to include representatives from the DfT as well as members / officers from other agencies or organisations.

The steering group will undertake an advisory role to the evaluation team to ensure that best use is made of **local knowledge, experience and skills** as part of the evaluation process. This will ensure that the evaluation is effectively managed and driven forward with consideration of a range of views.

The steering group will also advise on the commissioning of any sub consultants required to undertake specific elements of the evaluation such as data collection/analysis.

Upon completion, the results of the evaluation will be presented to the steering group. A review will be undertaken to establish whether the evaluation has fully captured the resultant impacts of the scheme.

7.3.3 Delivery Team

Below the Steering group will be the delivery teams, each managed and led by a discipline Team Leader.

Each team leader will be directly responsible for ensuring that work is completed in line with the Evaluation Plan and will report directly to the Evaluation Manager. Team Leaders will be responsible for identifying and reporting potential issues at an early stage to ensure resources are appropriately allocated in order to limit risks.

7.4 Quality Assurance

In order that the monitoring and evaluation exercise is a productive endeavour, the findings must be accurate, reliable and uncompromised. The evaluation must be independent, inclusive, robust and transparent.

There may be pressures on the evaluation project timescales and/or resources. Should such a situation occur, it is preferable to reduce the scope of the evaluation rather than compromise the quality of the evaluation.

The Evaluation Manager will ensure consistency in data collection, the methodology used, reporting and the interpreting of findings. The Evaluation Manager will be independent of the project team, providing impartiality to the evaluation. More information regarding the role of the Evaluation Manager is given in section 7.3.1 above.

Quality control is the responsibility of the Evaluation Manager. Quality assurance procedures will be implemented throughout the evaluation programme, enabling an early response to any problems encountered.

7.5 Management of Risk

It is important to consider potential risks to the Monitoring and Evaluation programme during the planning stage, so that mitigation measures can be identified and put in place should action be necessary. **Table 7-A** gives details of potential risks and measures to be taken to mitigate these risks.

Table 7-A: Mitigation measures for evaluation risks

Risk	Mitigation measures
Evaluation fails to fully address objectives	The approach to evaluation is to be agreed with LCC, DfT and the Steering Group before construction begins. It will be the responsibility of the independent Evaluation Manager to ensure the agreed approach is adhered to.
Failure to agree the purpose of evaluation	The Monitoring and Evaluation Plan is to be disseminated to the Steering Group to set out the purpose of evaluation so any areas of concern can be addressed.
Baseline data compromised by construction works starting	The data collection period is planned to take place in advance of the current expected start date for construction. The scheme promoter is aware of the importance of the baseline data collection taking place before the start of construction.
Outcome/impact evaluation being carried out too early	Data collection will take place one year and 4-5 years after scheme completion, as recommended by the DfT, in order to capture the outcomes and impacts respectively, allowing sufficient time for the scheme benefits to take effect.
Failure to understand the limitations of the data	Section 5 of this report gives details of the data to be collected and the conclusions that can be inferred from the findings. The methods of data collection have been designed to provide suitably detailed data for the evaluation requirements of the scheme and will be agreed with the DfT.
Evaluation design failing to provide robust data	Industry-standard forms of data collection are being employed and the evaluation has been designed to give thorough coverage of the area surrounding the bypass. The evaluation design will be agreed with the DfT.
Failure to foresee future analytical or data requirements	Permanent count sites and employment data needed to complete each stage of the evaluation need to be utilised. Forward planning is needed so that temporary traffic counts can be commissioned to replace any non-operational permanent traffic counts, and to ensure employment data is being collected periodically throughout the evaluation process. Data collection and analysis procedures will be agreed with the DfT.

Risk	Mitigation measures
Failure to gather sufficient, good quality data	There will be comprehensive coverage of the Broughton area by traffic counts that can be in place for longer if the data collected is not sufficient. Journey time surveys and employment data are more routine, non-project specific forms of data, which are less susceptible to technical problems. The evaluation design will be agreed with the DfT to ensure sufficient data is collected.
Producing evaluation findings that are not actionable or that do not have clear implications	The One Year After Report and Final Report will summarise findings in terms of lessons learned and improvements to scheme planning and delivery that could have brought about greater benefits. This information can then be used to inform proposals and decision making for similar schemes and to ensure good practice is replicated.
Poor or disrupted planning as a result of insufficient time, resources or management priority	The evaluation programme follows DfT guidance and will be agreed with the DfT. A suitably experienced independent Evaluation Manager will be appointed, who will be responsible for the delivery of the evaluation programme.
Failure to account for other outcome/impact influencing factors, and so not being able to directly attribute outcomes/impacts to this scheme	The Monitoring and Evaluation Plan will have to be assessed on an ongoing basis for its suitability, and amended as necessary to take account of any factors that may arise during the Monitoring and Evaluation programme.

7.6 Timescales for Reporting

Monitoring and Evaluation progress may be reported within the Quarterly Reports issued to the DfT during scheme construction.

Post-implementation, the One Year After Report is expected to be issued to the DfT, followed by the Final Report 4-5 years after scheme completion. This timeframe must allow for a six month window for data to be collated, analysed and the findings to be reported.

7.7 Dissemination Plan

As mentioned above, the One Year After and the Final Monitoring and Evaluation reports will be disseminated to the Project Board, the DfT and key stakeholders by the Evaluation Manager.

Briefings will be held with the Monitoring and Evaluation Steering Group, which includes local Members, the Local Enterprise Partnership, local Chamber of Commerce, Highways Agency and Local Access Forum.

Once those briefings have been held, the main method of disseminating the Monitoring and Evaluation reports will be via the Lancashire County Council website. This will be managed by LCC's communications department. Local press releases will be issued as appropriate.