

South East Blackburn Growth Corridor

Benefits Realisation, Monitoring and
Evaluation Report
November 2019



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1. Scheme Context and Background

1.1 Scheme Context

Capita Real Estate and Infrastructure Ltd has been commissioned by Blackburn with Darwen Borough Council (BwDBC) to prepare a full business case in support of proposed highway and junction improvements around south east Blackburn. This Monitoring and Evaluation (M&E) Plan is written in conjunction with the main business case document and will provide details of the M&E methodology for the scheme and the expected data requirements. This document also contains Logic Mapping of the proposed scheme (Appendix A) in line with DfT guidance, as well as a Benefits Realisation Plan (Appendix B), which defines expected scheme benefits, setting out a logical sequence of outcomes and benefits aligned with scheme objectives.

The overall scheme is subject to a funding bid by BwDBC to the Lancashire Local Enterprise Partnership (LEP). The Lancashire LEP represents the body responsible for administering allocated Growth Deal 3 (GD3) funding, the latest round of Growth Deal funding made available by central government.

The scheme consists of the following highway interventions across south east Blackburn:

- Widening of the A6077 Haslingden Road between Lions Drive and Shadsworth Road to four lanes with associated geometric improvements at junctions;
- Delivery of the Blackmoor Link Road including two new junctions at Roman Road and Blackmoor Road and associated changes at the existing Roman Road / Blackmoor Road junction; and
- Improvements to the Haslingden Road / Old Bank Lane junction to also include a new access to the Royal Blackburn Teaching Hospital.

Works are proposed to start in early 2020 and be complete by March 2021. The project aims to:

- Enable Blackburn with Darwen Borough Councils growth ambitions to be realised without adversely impacting on the existing level of service (congestion) provided by the Haslingden Road corridor and adjoining local highway network;
- Improve air quality at the Blackmoor Road / Roman Road junction to bring nitrogen dioxide levels within the (annual mean) objective as specified in the Air Quality (England) Regulations 2000 (as amended) to enable the revocation of the Blackmoor AQMA;

- Enable further development of employment opportunities by facilitating the delivery of over 47,894sqm of new commercial floorspace creating approximately 3,862 jobs;
- Supporting future housing growth by enabling the delivery of approximately 643 additional houses within the borough; and
- Improve the facilities for walking and cycling along Haslingden Road, providing a safer environment to encourage participation in active travel.

1.2 Scheme Delivery Strategy and Timeframe

The partner organisations involved in and committed to supporting the scheme are:

- Lancashire Local Enterprise Partnership; and
- Blackburn with Darwen Borough Council.

Scheme delivery is expected to take place over the following timescale:

- Procurement process for the works between 9th September 2019 and 19th November 2019
- Final Business Case submission on 21st November 2019
- Construction work begin on 13th April 2020
- Completion of works on 16th March 2021

2. Scheme Objectives and Expected Outcomes

2.1 Scheme Objectives

The following objectives have been devised for the South East Blackburn Growth Corridor Scheme which should sufficiently address the identified issues:

- Enable Blackburn with Darwen Borough Councils growth ambitions to be realised without adversely impacting on the current level of service (congestion) provided by the Haslingden Road corridor and adjoining local highway network;
- Improve air quality at the Blackamoor Road / Roman Road junction to bring nitrogen dioxide levels within the (annual mean) objective as specified in the Air Quality (England) Regulations 2000 (as amended) to enable the revocation of the Blackamoor AQMA;
- Enable further development of employment opportunities by facilitating the delivery of over 47,894sqm of new commercial floorspace creating over 3,862 jobs; and
- Supporting future housing growth by enabling the delivery of over 643 additional houses within the borough.

2.2 Expected Scheme Outcomes

It is intended that successfully achieving these objectives will result in the following observable outcomes:

- A local highway network with comparable levels of service in the future years as currently exist;
- Improved access to proposed housing and employment development sites across south east Blackburn;
- Enhanced connectivity along the A6077 Haslingden Road and at the Roman Road/ B6231 Blackamoor Road Junction; and
- Reduced vehicle emissions from a reduction in delay and queuing on the local highway network at the Roman Road/ B6231 Blackamoor Road Junction.

2.3 Expected Scheme Beneficiaries

The intended beneficiaries of the proposed scheme outcomes are as follows:

- Private car users commuting or travelling along Haslingden Road;
- Public transport users commuting or travelling along Haslingden Road;
- Individuals living in, working in or visiting areas across south east Blackburn, including individuals travelling to/ from RBH;
- Pedestrian and active travel mode users around the Roman Road/ Blackamoor Road Junction;
- Residents of the wider BwD authority area who will benefit from economic development of the area;
- Residents of the wider BwD authority area who will benefit from increased housing and employment opportunities across the Borough; and
- Residents within the AQMA.

2.4 Expected Scheme Impacts

It is intended that successfully achieving these outcomes will result in the following observable long-term impacts:

- Transport Economic Efficiency savings from reduced user delay (as compared to a do-minimum scenario);
- Economic growth and development across south east Blackburn;
- Reduced unemployment from increased number of jobs at new employment sites;
- Improved road safety from a reduction in congestion across the local area;
- Improved public health from improved air quality; and
- Improved air quality in the local AQMA.

3. Monitoring and Evaluation Scope and Objectives

3.1 Evaluation Scope and Requirements

The Monitoring and Evaluation (M&E) plan for the South East Blackburn Growth Corridor Scheme takes a proportionate and targeted approach, which will aim to demonstrate how the scheme has performed in relation to its objectives and intended outcomes.

The principle aims of M&E are to determine whether a scheme has been delivered as planned and whether it has delivered the expected benefits. Where outcomes differ from those expected, data collected for M&E evidence base will assist in understanding the reasons for this and the lessons that can be learnt.

As indicated by the Transport for Lancashire (TfL) Assurance Framework document, M&E of scheme progress and success will be undertaken in line with the standard set of measures outlined in DfT M&E guidance¹. These are detailed as follows:

Item	Stage	Data Collection Timing	Rationale
Scheme build	Input	During delivery	Knowledge
Delivered scheme	Output	During delivery/post opening	Accountability
Costs	Input	During delivery/post opening	Accountability
Scheme Objectives	Output/Outcome/ Impact	During delivery/post opening (up to 5 years)	Accountability
Travel Demand	Outcome	During delivery/post opening (up to 5 years)	Accountability/ Knowledge
Travel Times and Reliability	Outcome	During delivery/post opening (up to 5 years)	Accountability/ Knowledge
Impact on Economy	Impact	Pre or during delivery/ Post opening (up to 5 years)	Accountability/ Knowledge
Carbon	Impact	Pre or during delivery/ Post opening (up to 5 years)	Accountability/ Knowledge

A key strategic objective and purpose of TfL is to monitor progress of scheme delivery and spend. TfL will put in place a mechanism to ensure that it monitors and evaluates schemes in accordance with the appropriate DfT guidance.

¹ DfT Monitoring and Evaluation Framework for Local Authority Major Schemes:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9154/la-major-schemes-monitoring-evaluation.pdf

TfL requires scheme promoters to submit regular monitoring reports setting out progress on scheme preparation and/or delivery. This will allow TfL to collate information from scheme promoters, indicate progress against key milestones and highlight any risks. A RAG rating identifies schemes at risk of not meeting their objectives.

The following metrics (as detailed within the LEP's Monitoring and Evaluation Framework) will be assessed as part of the Monitoring and Evaluation of the South East Blackburn Growth Corridor Scheme:

- **Expenditure (quarterly):** Scheme expenditure will be collected from the Council's CIVICA system, summarised and reported to the LEP quarterly. Expenditure will be split by the following categories: Construction (Main Contractor fees), Statutory Undertakers' Diversions, Preparation fees, Supervision fees.
- **Funding breakdown (quarterly):** identified through Council internal programme monitoring (LTP and capital projects) with split between the LEP and BwDBC contributions.
- **In-kind resources (quarterly):** to be identified and reported to the LEP quarterly.
- **Jobs connected to the intervention (annual):** Rate of delivery to be monitored by BwDBC and reported.
- **Commercial floorspace constructed (annual):** Rate of delivery to be monitored by BwDBC and reported.
- **Commercial floorspace Occupied (annual):** to be identified and reported to the LEP annually.
- **Housing unit starts (annual):** Rate of delivery to be monitored by BwDBC and reported.
- **Housing unit completed (annual):** Rate of delivery to be monitored by BwDBC and reported.
- **Total length of resurfaced roads (quarterly):** Length of road for which works have been completed and now open for public use will be reported.
- **Total length of newly built roads (quarterly):** The length of the newly built Blackamoor Link Road will be monitored and reported.
- **Type of Infrastructure to be delivered:** The scheme will deliver new and improved road infrastructure.
- **Type of service improvement delivered (biannual):** none connected with the scheme.

- **Follow-on investment at site (annual):** Any further transport investment which may come via s106 contributions from developers to improve the active travel and public transport infrastructure in the local area will be monitored.
- **Commercial floor space occupied (annual):** Rate of delivery to be monitored by BwDBC and reported.
- **Commercial rental values (annual):** none connected with the scheme.
- **Average daily traffic and by peak/non-peak periods (biannual) / Average AM and PM peak delay at the junctions – (biannual) / Day-to-day travel time variability (biannual):** Data sources include Manual Classified Counts (MCCs) at the junctions within the study area, average speed, traffic congestion statistics and average journey times. Statistics will be collated and reported to LEP.
- **Average annual CO2 emissions (biannual):** Air quality indices to be monitored by BwDBC and reported. Can be measured in the vicinity of the scheme for the pre-scheme and post-scheme scenario.
- **Accident rate (biannual) / Casualty rate (biannual)/Types of accidents:** STATS19 or CrashMap collision data. Statistics will be collated and reported to LEP. Analysis of the accident data collected should take place every three to five years post scheme implementation.
- **Pedestrian counts on new / existing routes (annual):** Future pedestrian counts can be undertaken along the new and existing route.
- **Nitrogen Oxide and particulate emissions (biannual):** Air quality indices to be monitored by BwDBC and reported. Can be measured in the vicinity of the scheme for the pre-scheme and post-scheme scenario.

3.2 Evaluation Objectives

The M&E plan is designed to determine whether the South East Blackburn Growth Corridor Scheme:

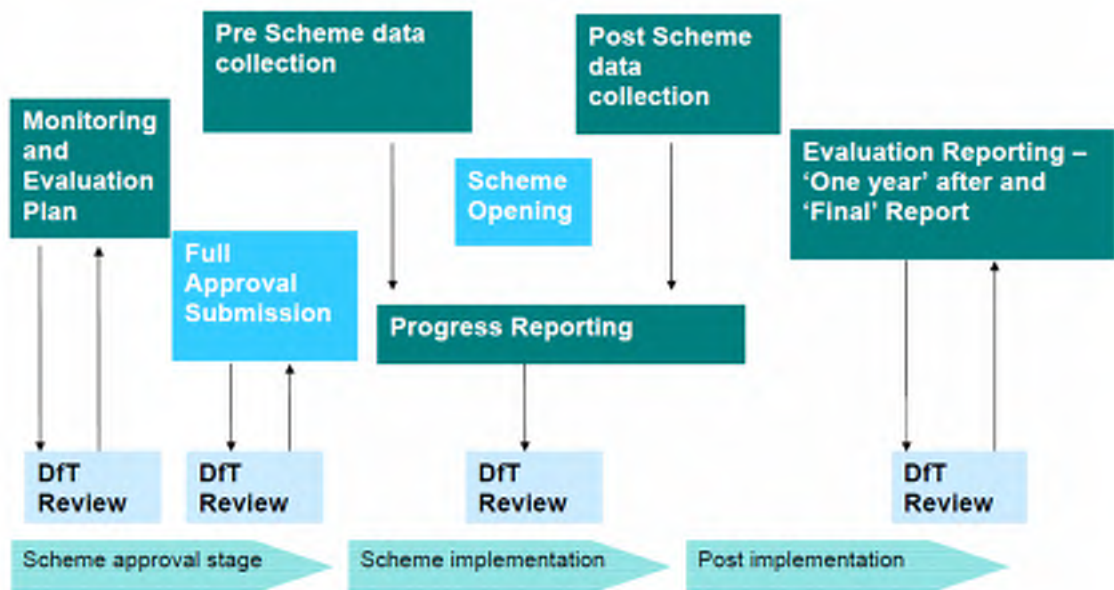
- Has been designed and delivered efficiently and effectively;
- Has met the requirements of the stated scheme objectives;
- Has achieved the desired outcomes and impacts; and
- Has resulted in any unintended outcomes and impacts (both positive and negative).

4. Monitoring and Evaluation Approach and Methodology

4.1 Evaluation Approach

As defined by the TfL Assurance Framework, M&E for the road improvement scheme will follow the standard approach outlined by current DfT guidance. Evaluation requires a comprehensive, integrated research approach in order to carry out all components effectively, including analysis of scheme context, scheme delivery and wider impacts. M&E will aim to highlight how the scheme and its objectives are performing, and establish outcomes resulting from road improvements. The process for M&E outlined in current DfT guidance is detailed in Figure 4.1 below.

Figure 4.1. Local Authority Major Schemes: M&E Process



4.2 Logic Mapping

The logic map detailed in Appendix A highlights the links between context, inputs, outputs, outcomes and impacts of the scheme and gives a visual representation of where M&E should be focused. The logic map will be used as a basis to establish the evaluation approach, and ensure monitoring resources are targeted appropriately through the timeline of scheme development to provide effective measurement of objectives and outcomes.

4.3 Evaluation Timescale

M&E will be required both during development and construction, as well as in the years following implementation of the road improvement scheme in order to meet the stated evaluation objectives and effectively assess any scheme outcomes and impacts. As per DfT Standard Monitoring guidance, M&E is expected to take place over the following timescale:

- Prior to scheme build (baseline): 2018 to January 2020
- During construction: April 2020 to March 2021; and
- Post scheme implementation:
 - o One Year After Report: Early/Mid 2022
 - o Final Evaluation (Five Years After) Report: Early/Mid 2027

As defined by the TfL assurance framework, regular monitoring reports are to be submitted to TfL by scheme promoters during the development and construction phase until scheme completion to ensure the intended outcomes are realised.

5. Data Requirements and Collection Methods

5.1 Data Requirements

Data collection for the South East Blackburn scheme is required at various stages through scheme development to ensure effective M&E takes place. These stages are detailed and reported as follows:

- Baseline Conditions: Prior to scheme implementation;
- During scheme development and construction;
- One Year After Report; and
- Final Report (five years after).

Consideration will be given for the need to undertake data collection in neutral months and in the same period during each evaluation stage.

Relevant data sources required to establish baseline conditions and traffic flows on the local highway network is as follows:

- Scheme construction and cost data;
- MCC turning proportions at junctions along Haslingden Road between its junctions with the B6231 Blackamoor Road and Old Bank Lane, as well as at the Roman Road/ B6231 Blackamoor Road Junction. The MCC count locations can be found in Appendix C;
- Queue length at junctions along Haslingden Road between its junctions with the B6231 Blackamoor Road and Old Bank Lane, as well as at the Roman Road/ B6231 Blackamoor Road Junction;
- ATC and speed survey data along the A6077 Haslingden Road and the B6231 Blackamoor Road;
- Collision data on the A6077 Haslingden Road and the B6231 Blackamoor Road, as well as at the Roman Road/ B6231 Blackamoor Road Junction;
- Journey time data will be collected from the following routes – along Haslingden Road from the junction with the M65 to the junction with the A6077, Blackamoor Road between the junction with Haslingden Road to the junction with Roman Road, and Roman Road from the junction with Blackamoor Road to the junction with Haslingden Road, these three routes are outlined in Appendix D; and

- Air quality monitoring data (site locations outlined in Appendix E).

Relating to the metrics detailed in Section 3.1, scheme construction and cost data will be required for M&E of scheme build, the delivered scheme and realised scheme costs. ATC, MCC data, queue length, collision data, speed survey data and journey times are required for M&E of travel demand, junction delay and the impact on the economy. Air quality data is required for M&E of scheme impact on nitrogen oxide and particulate emissions and carbon. All data types are required to assess whether the scheme has achieved its intended objectives.

5.2 Data Sources

Relevant data required for M&E of the South East Blackburn Growth Corridor Scheme will be obtained from the following sources:

- ATC, speed surveys, journey times, MCC and queue length data will be undertaken by an independent traffic survey company. Post opening scheme traffic counts at one year and five year post opening stages; and
- Online records of Personal Injury Collision data (STATS19 and/or CrashMap);
- Established air quality monitoring sites;
- Rate of delivery of scheme dependent commercial floorspace and housing units will be obtained from information contained in housing annual monitoring reports produced by BwDBC.

A benefits realisation plan outlining where each data source shall be used to determine how the scheme is performing against the delivery of each of its objectives is provided in the Benefits Realisation Plan found in Appendix B.

6. Monitoring and Evaluation Resourcing and Governance

6.1 Governance

Responsibility for the delivery and implementation of M&E for the South East Blackburn Growth Corridor Scheme lies with BwDBC, as the leading scheme promoter and advocate for intervention. As leading scheme promoter, BwDBC will be responsible for submitting regular reports to TfL as detailed in the programme and risk management guidance within the TfL Assurance Framework.

BwDBC also represents the local highway authority, responsible for ensuring efficient traffic flows and sustainable development on the local highway network.

BwDBC is committed to ensuring that the scheme is monitored and evaluated effectively to ensure that:

- The scheme can be improved, where possible;
- Future schemes can be improved in terms of efficiency and effectiveness;
- BwDBC have a more comprehensive knowledge of the evaluation process which will help inform and guide future major transport scheme decisions;
- Robust evidence is developed surrounding the road improvement scheme to help the BwDBC respond to queries and criticism;
- There is demonstrable evidence that the scheme achieved its intended outcomes and provided value for money; and
- Scheme benefits observed have been generated by the scheme and the proposed intervention.

The Benefits Realisation Plan found in Appendix B details the expected benefits and beneficiaries of the scheme and its objectives. BwDBC will ensure the intended scheme benefits are achieved through the M&E reporting process.

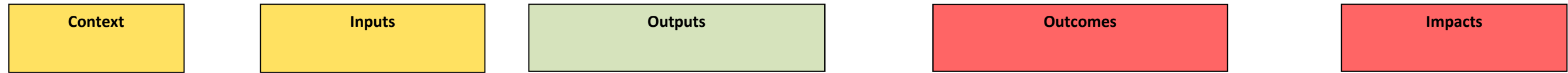
6.2 M&E Cost

M&E costs are not included within the South East Blackburn Growth Corridor scheme costs or funding. It is stated within the TfL Assurance Framework that the LEP will not fund scheme development and preparation costs nor any post scheme monitoring and evaluation.

It is therefore the responsibility of BwDBC to ensure that funding is secured to undertake planned M&E. Indicative costs to complete M&E will involve expected expenses as follows:

- Collection of traffic flow data (ATC including speed survey, MCC and queue length survey data, journey time data);
- Comparison of the actual future traffic flows and queue length data with the modelled predictions; and
- Reporting of 'One Year After' and 'Final' reporting stages.

Appendix A – Logic Map



The scheme consists of the following highway interventions across south east Blackburn:

- Widen Haslingden Road between Guide and Royal Blackburn Hospital to three and four lanes;
- Upgrade Roundabouts at major access points; and
- Deliver the 'Fishmoor Link Road' including two new junctions at Roman Road and Blackamoor Road

Works are proposed to start in early 2020 and be complete by March 2021. The project will:

- Improve congestion on the Haslingden Road corridor to / from Royal Blackburn Hospital and M65 Junction 5;
- Improve air quality at Blackamoor Junction (which is a designated Air Quality Management Area);
- Enable further development of employment opportunities; and
- Support future housing growth in the Borough.

- LEP funding
 - BwDBC funding
-
- BwDBC Resources
 - Consultant Resources
 - LEP Resources
 - Contractor Resources

Provision of S4 carriageway between the Haslingden Road/ Lions Drive (Bee Hive) Junction and the Haslingden Road / Shadsworth Road Junction.

Complementary improvements to junctions along the section of Haslingden Road to be improved.

Provision of a new 'Fishmoor Link Road', providing a new alignment for Blackamoor Road, including accesses to new development plots

Two new junctions providing access to the new link road.

An improved Roman Road/ Blackamoor Road Junction

A local highway network able to cope with the existing traffic flows

A local highway network able to cope with the expected increase in traffic in the future years.

Accelerate housing and employment developments across south east Blackburn

No increase in traffic delay along the A6077 Haslingden Road and a reduction in delay at the Roman Road/ B6231 Blackamoor Road Junction

Reduced vehicle emissions from a reduction in delay and queuing on the local highway network.

Economic:
Transport Economic Efficiency savings from reduced user delay (as compared to a do-minimum scenario)

Economic growth and development across south east Blackburn

Reduced unemployment from increased number of jobs at new employment sites

Social:
Improved road safety from a reduction in congestion across the local area

Improved public health from improved air quality

Environmental:
Improved air quality in the local Air Quality Management Area (AQMA).

The logic map addresses the following fundamental questions:

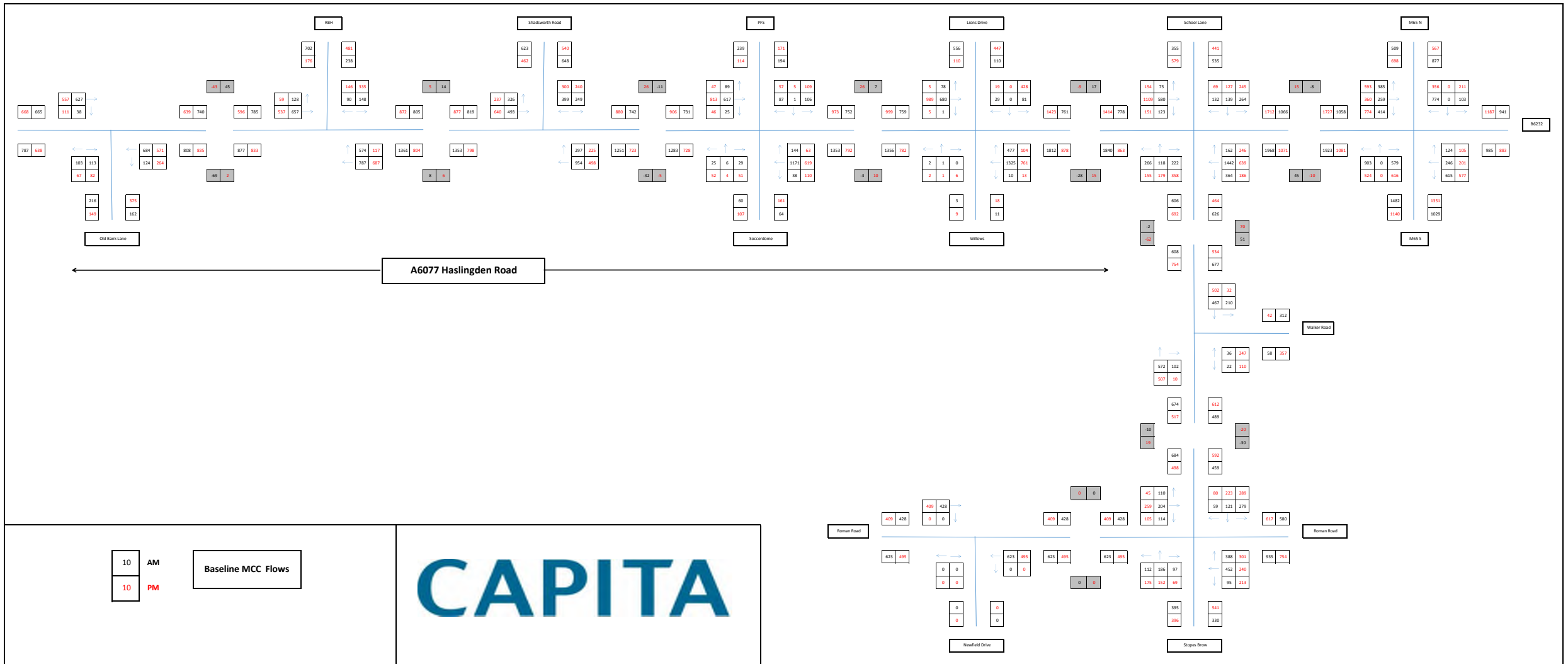
Will the scheme result in:

1. Reduced traffic delay, congestion and queueing along the A6077 Haslingden Road, the B6231 Blackamoor Road and at the Roman Road/ Blackamoor Road Junction;
2. Reduced journey times along the A6077 Haslingden Road in both directions during peak travel periods, and along approach arms to the Roman Road/ Blackamoor Road junction.
3. Journey time savings for public transport users;
4. Improved road safety through reduced congestion;
5. Reduced vehicle emissions from a reduction in delay and queueing on the local highway network; and
6. Improved air quality in the AQMA.

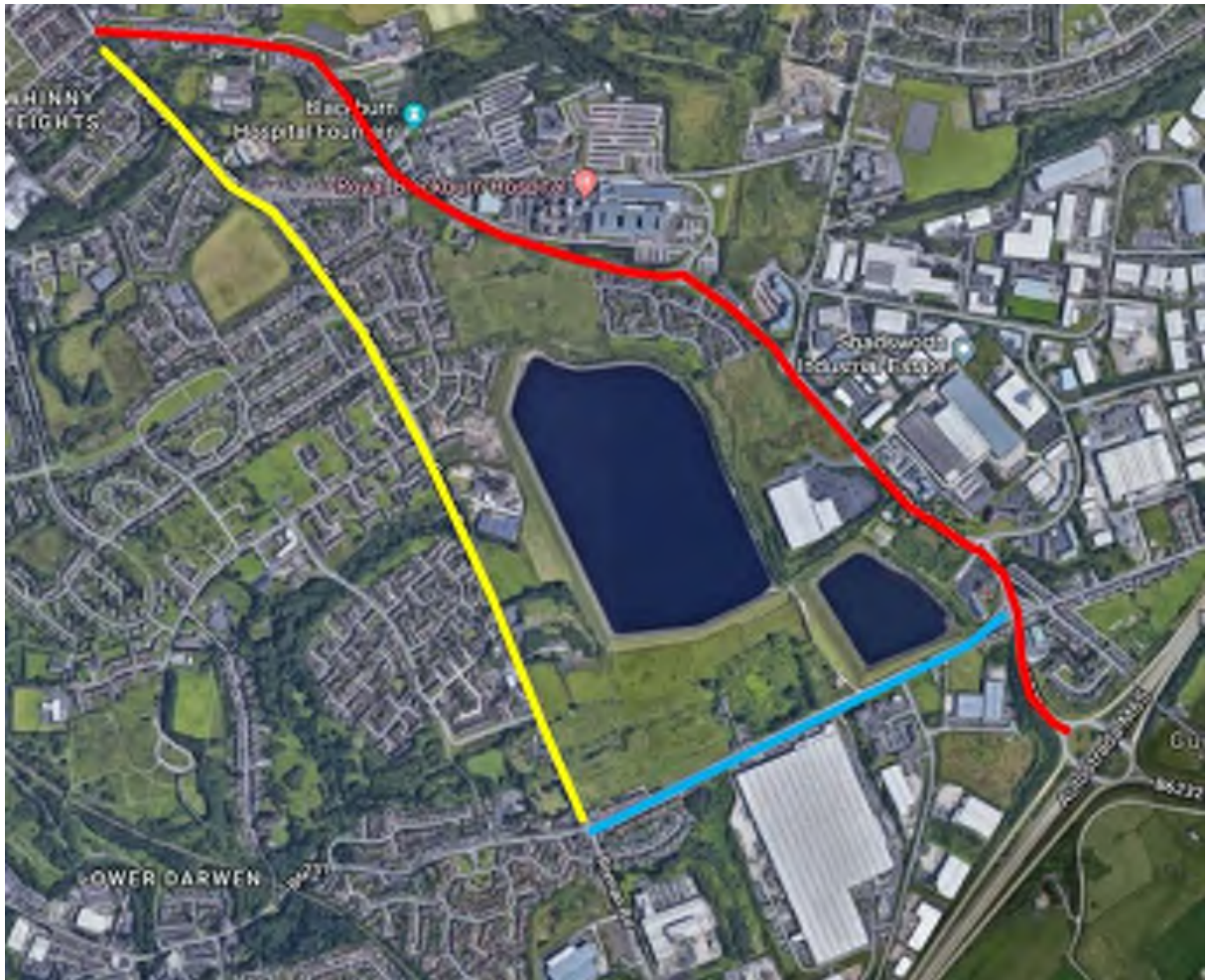
Appendix B – Benefits Realisation Plan

Scheme Objective	Expected Scheme Outcomes	Expected Benefits	Expected Beneficiaries	Intervention Required to Realise Benefits	Method of Measurement	Ownership
Improve congestion on the Haslingden Road corridor to / from Royal Blackburn Hospital and M65 Junction 5	Improved highway capacity along Haslingden Road No worsening of traffic flow conditions and efficiency along Haslingden Road Improved capacity at the Roman Road/ Blackamoor Road Junction	A local highway network able to cope with the existing and future forecast traffic flows	Private car users commuting or travelling along Haslingden Road Individuals living in, working in or visiting areas across south east Blackburn	Widening of Haslingden Road link sections and associated junction improvements Junction improvements at the Roman Road/ Blackamoor Road junction and tie-in to new link Road	Traffic count (MMC) data and speed (ATC) data along the Haslingden Road Corridor Between RBH and M65 Junction 5 Local route perception surveys of vehicle users travelling along impacted routes	Blackburn with Darwen Borough Council
Improve air quality at Blackamoor Junction (which is a designated Air Quality Management Area)	Improved capacity at the Roman Road/ Blackamoor Road Junction Reduced congestion around the Roman Road/ Blackamoor Road Junction	Environmental benefits from improved air quality Social benefits from improved public health	Individuals living in, working in or visiting areas across south east Blackburn Pedestrian and active travel mode users around the Roman Road/ Blackamoor Road Junction	Junction improvements at the Roman Road/ Blackamoor Road junction and tie-in to new link Road	Local air quality monitoring data post opening	Blackburn with Darwen Borough Council
Enable further development of employment opportunities	Improved highway capacity and no increases in delay along Haslingden Road Improved access and vehicle accessibility into local plan site allocations and other proposed development sites	Increased employment opportunities across south east Blackburn Reduced local deprivation across south east Blackburn Improved secondary social and economic impacts, such as reduced crime, improved public health etc	Residents of the wider BwD authority area who will benefit from economic development and increased employment opportunities	Widening of Haslingden Road link sections and associated junction improvements Junction improvements at the Roman Road/ Blackamoor Road junction and tie-in to new link Road Construction of the new 'Fishmoor Link Road' to provide enhanced access to local plan employment and housing site allocations	Local economic growth and development figures post opening	Blackburn with Darwen Borough Council
Support future housing growth in the Borough	Improved highway capacity and no increases in delay along Haslingden Road Improved access and vehicle accessibility into local plan site allocations and other proposed development sites	Improved provision of housing across south east Blackburn	Residents of the wider BwD authority area who will benefit from improved housing opportunities	Widening of Haslingden Road link sections and associated junction improvements Junction improvements at the Roman Road/ Blackamoor Road junction and tie-in to new link Road Construction of the new 'Fishmoor Link Road' to provide enhanced access to local plan employment and housing site allocations	Local housing growth and development figures post opening	Blackburn with Darwen Borough Council

Appendix C – MCC Count Locations



Appendix D – Journey Time Route Map



Appendix E – Air Quality Monitoring Sites



Table C. 1 Key Air Quality Receptors

Receptor	Ordnance Survey National Grid Reference		
	X(m)	Y(m)	Z(m)
1	369236	426694	1.5
2	369369	426610	1.5
3	369550	426601	1.5
4	369670	426515	1.5
5	369698	426535	1.5
6	369806	426479	1.5
7	369855	426469	1.5
8	369902	426481	1.5
9	369972	426363	1.5
10	370307	426022	1.5
11	370348	426020	1.5
12	370378	425961	1.5

Receptor	Ordnance Survey National Grid Reference		
	X(m)	Y(m)	Z(m)
13	370487	425899	1.5
14	370574	425833	1.5
15	370589	425824	1.5
16	370851	425845	1.5
17	370359	425720	1.5
18	369886	425488	1.5
19	369667	425297	1.5
20	369549	425510	1.5



Figure C. 2 Location of Modelled Receptors

Source: QGIS and OS Open Source

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