Cheshire East Council
Middlewich Eastern Bypass
Full Business Case

(Draft)

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Executive Summary

The Middlewich Eastern Bypass (MEB) scheme involves the construction of a new 2.6km single carriageway road to the east of Middlewich, Cheshire, connecting the A54 Holmes Chapel Road to the A533 Booth Lane. The scheme will provide a strategic bypass for Middlewich, relieving congestion and unlocking major employment growth at the Midpoint 18 site.

Middlewich suffers from severe traffic congestion due to its limited road network capacity and high volumes of through traffic. Journey time surveys show that congestion causes major delays, poor journey time reliability, and transport constraints on growth. Traffic forecasts predict further worsening of congestion without intervention.

The scheme objectives are to reduce congestion, improve journey times, enhance journey reliability, improve road safety, support wider economic growth and facilitate major development sites.

The MEB demonstrates strong strategic fit with pertinent local, regional and national policies. It directly aligns with the vision for employment-led growth in Middlewich within the Cheshire East Local Plan. The scheme is strongly supported by the Cheshire and Warrington Local Enterprise Partnership as pivotal to realising its strategic growth ambitions.

There was overwhelming support for the scheme from public consultation in 2016, with 79% of respondents stating that Middlewich suffers severe congestion issues. 61% prioritised construction of a bypass above all other interventions.

The economic dimension presents a Value for Money assessment of monetised and non-monetised impacts. With a Benefit Cost Ratio of 1.18, the scheme demonstrates that despite extraordinary construction cost inflation the scheme still delivers positive Value for Money. The Present Value of Benefits is £46.11m against a Present Value of Costs of £39.13. A Gross Value Added assessment forecasts the scheme could facilitate an additional £412m net GVA uplift over 60 years through enabling employment growth.

The financial dimension presents the funding package combining DfT grant, local contribution and private sector funding. The total outturn scheme cost is £95.7m. Funding has been approved by Cheshire East Council Committee subject to the approval of this report and the Section 151 Officer has previously provided a letter confirming the Council's commitment. Recent budget increases have been endorsed and approved in the Councils Medium Term Financial Strategy and by the Highways and Transportation Committee.

A two-stage Early Contractor Involvement (ECI) procurement via the Scape framework has been followed to appoint Balfour Beatty. The contract will utilise a NEC3 Option C target cost approach. The Council has recent and ongoing successful experience of delivering Major Projects using this procurement option and the delivery of the project has benefitted from the ECI pre-construction input.

The management dimension defines the governance structure, assurance processes, project plan, risk management strategy, and stakeholder engagement plan to successfully deliver the scheme. It provides confidence that the project can be delivered effectively to realise the expected benefits.

In summary, the business case demonstrates that the MEB scheme addresses major problems in Middlewich, offers positive Value for Money and strong strategic fit, enjoys overwhelming public and stakeholder support, and will be delivered successfully.

1. Strategic Dimension

1.1 Strategic Context

Middlewich is a historic market town in the heart of Cheshire, with Roman origins and a current population of approximately 14,400 residents. It lies equidistant between the major urban areas of Merseyside to the north west, Greater Manchester to the north east and Crewe to the south.

The vibrant and diverse Cheshire and Warrington economy is one of the strongest performing in England, generating a gross value added (GVA) of £20 billion per year. The Local Enterprise Partnership has an ambitious vision to increase GVA to £35 billion per year by 2030, lifting GVA per head to 115% of the national UK average. This would cement Cheshire and Warrington's status as the powerhouse economy of the Northern Powerhouse. Underpinning this aim is attracting an additional 100,000 residents, creating 75,000 new jobs, and building 70,000 new homes by 2030.

The Middlewich Eastern Bypass (MEB) has been energetically promoted by Cheshire East Council (CEC) and local stakeholders as the key to unlocking the town's economic potential. It will achieve this by tackling the severe traffic congestion which blights the town, improving journey times and journey time reliability on key routes and facilitating further development of the Midpoint 18 site and other strategically important employment locations allocated in the Local Plan.

Car ownership in Middlewich and across Cheshire East is significantly higher than the national average, reflecting limited alternatives to the private car. Subsequently, the car accounts for over 75% of commuting trips, while opportunities to travel sustainably by public transport remain constrained.

Comprehensive journey time surveys have demonstrated acute and chronic congestion within Middlewich during both morning and evening peak travel periods. Without firm intervention, forecast traffic growth driven by housing and employment expansion will further exacerbate congestion and environmental impacts.

Middlewich accommodates several strategically important development sites earmarked for expansion in the Local Plan, including the major Midpoint 18 employment hub. However, development has slowed markedly since 2008 as existing traffic constraints sap the commercial attractiveness of sites. Traffic congestion in Middlewich is unanimously considered to be having a profoundly negative impact upon the economic performance of the town.

Drawing on the identified problems, a defined set of objectives has been rigorously developed for the scheme. The Middlewich Eastern Bypass will make a significant positive contribution to achieving all objectives by providing a long overdue bypass for the town centre, enabling the Midpoint 18 development and thus supporting sub-regional economic growth and local housing as well as employment growth.

The scheme demonstrates a strong strategic fit with pertinent local, sub-regional and national policies. It is pivotal to delivering employment-led growth in Middlewich, which represents the central vision for the town's future contained in Cheshire East's Local Plan.

A far-reaching public consultation exercise was undertaken in 2016, generating overwhelming support from both residents and businesses. 79% of respondents stated that Middlewich suffers severe congestion issues, with 61% prioritising construction of a bypass above all other interventions.

Investing in the Middlewich Eastern Bypass scheme will address the raft of existing and future problems blighting Middlewich, underpinning waves of future public and private investment and growth. The scheme is thus considered an urgent priority by all key public and private stakeholders alike, as emphatically evidenced by their letters of wholehearted support for the outline business case.

In summary, the rationale for unlocking investment in the Middlewich Eastern Bypass scheme is patently strong and aligns closely with policy objectives at local, regional, and national tiers. The scheme will provide the key to unlocking the constraints that shackle future growth and prosperity in this historic Cheshire market town.

Scheme History

The need for an eastern bypass of Middlewich has been acknowledged for many years and was first proposed around 40 years ago by Cheshire County Council, a predecessor local government body to the Acquiring Authority and Cheshire West & Chester Council.

The Acquiring Authority (including its predecessor local government bodies) previously worked in collaboration with a private sector developer, Pochin Group, to deliver an eastern bypass in conjunction with

the construction of major logistics distribution facilities within the Midpoint 18 Business Park, with that scheme being effectively developer led and financed.

This previous bypass was partially completed in the late 1990's and currently extends from A54 Holmes Chapel Road into the Midpoint 18 Business Park. The partially completed route, called Pochin Way, currently serves several commercial units but does not connect with any other highways and terminates in a dead end.

In 2008, planning permission was granted under reference 07/0323/OUT for the final section of the developer led bypass, to connect Pochin Way to the A533 Booth Lane at Tetton Bridge. This consent included several commercial units in the southern section of the LPS 44 (Midpoint 18) but was conditioned such that further development could not take place until the completion of the bypass. In July 2011 a five-year extension to the planning permission was granted under reference 11/0899C.

The route of the final section of the bypass was an approved Cheshire County Council scheme identified in the County Council's Local Transport Plan. It was safeguarded in the Congleton Local Plan under Policy DP10 and carried forward as a saved policy in Appendix B: Saved Policies of the Cheshire East Local Plan Strategy.

Despite the Acquiring Authority securing grant funding of £4.1 million from Central Government and the Acquiring Authority agreeing to forward fund £2.5 million of potential Section 106 contributions, the private sector failed to deliver this developer led bypass. In consequence of this, the Acquiring Authority assumed responsibility for delivery of the bypass from Pochin Group in 2016. The Acquiring Authority subsequently undertook a strategic review of the bypass, which involved an assessment of a series of route options for delivery of an eastern bypass.

In June 2016, planning permission was granted under reference 16/2006C for an application made under Section 73 of the Town & Country Planning Act to vary planning conditions that were attached to the 2011 planning consent. This enabled reserved matters application 16/3242C to be submitted which effectively extended the consent for a further three years enabling it to be retained as an implementable option whilst the strategic review was being undertaken and completed.

The Case for Change

1.1.1 Existing Arrangements

1.1.1.1 Population, Economy, and Skills

Analysis of 2011 Census data reveals high levels of car ownership and commuting by car amongst Middlewich residents compared to national averages. By contrast, opportunities to travel by alternative sustainable public transport modes remain severely limited. Middlewich residents typically travel substantially further to work, underlining that many commute longer distances to employment centres in nearby towns. The proportion of residents holding higher level skills qualifications trails slightly below the national average. The Cheshire and Warrington economy is rightly regarded as one of the strongest performing in England, generating £20 billion in gross value added annually. However, major infrastructure investments are urgently required to enable Middlewich and the wider Cheshire East area to achieve its full economic potential. Locally, key employers operating in Middlewich have expressed mounting needs to improve strategic transport links serving the town so they may continue to flourish and expand.

1.1.1.2 Transport Network

A legacy of Middlewich's heritage as a historic crossing point of the River Croco is that two major highways - the A530 and A54 - converge in the heavily congested town centre. The town's roads thus carry an unhealthy mix of local Middlewich traffic intermingled with strategic traffic simply passing through, on-route to destinations further afield. Proximity to larger urban centres, including Northwich, Crewe, Winsford and Greater Manchester, means Middlewich has also evolved into a commuter town for those working in these major centres of employment. This 'perfect storm' of factors leads to localised congestion hotspots during peak travel periods. Figure 1.1 shows an Ordinance Survey map of the local road network around Middlewich.

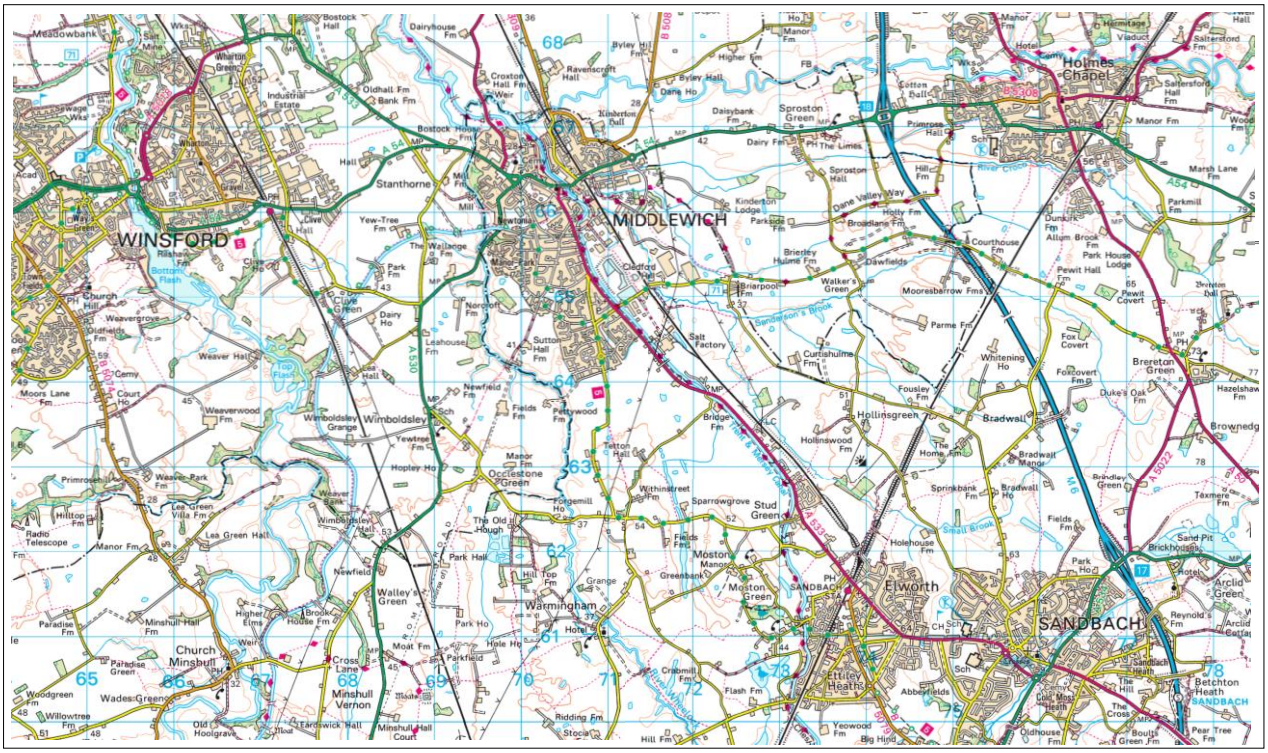

Figure 1.1 Local Road Network around Middlewich

Public Transport

Bus services within Middlewich itself are extremely limited, with just two regular routes passing through six days a week and no bus services operated on Sundays. Rail stations require travel to nearby towns Winsford and Sandbach, located 4 and 8 miles away respectively. Faster connections to London are only available by first driving 20-30 minutes to access Crewe station. Therefore, Middlewich suffers from extremely poor levels of direct connectivity to the rail network.

1.1.1.3 Non-Motorised Users

A number of signed cycle routes have been constructed in Middlewich, including a short section of the National Cycle Network Route 5. However, the walking and cycling provision available does little to facilitate short local trips or support the main north-south/east-west travel demands.

1.1.1.4 Travel Patterns

Census findings highlight very high volumes (approx. 53,000 trips per day) of car commuting trips into and out of Cheshire East each day, of which 85% are made by car. Locally, car ownership is high while public transport alternatives remain starkly limited. This paucity of choice results in heightened congestion on Middlewich's key routes, which carry both local and strategic traffic movements. The town's proximity to major employment centres also sees it functioning increasingly as a commuter town, adding further stress at peak times.

1.1.1.5 Traffic Speeds and Journey Times

Trafficmaster 2016 datasets, consisting of extensive and accurate GPS sourced traffic data, have been used to gain an understanding of the average traffic conditions on key roads around Middlewich, with more detailed modelling of the network and key junctions on the networks undertaken as part of the scheme development. Trafficmaster data sets are used extensively by the Department for Transport, local authorities, and public and private transport providers throughout the UK.

Traffic data for the AM and PM peak periods have been analysed and during the AM peak the A54 Chester Road and the A54 Kinderton Street / Holmes Chapel Road are the most congested with traffic moving slowly on the approaches to Middlewich.

In the PM peak all approaches to Middlewich are medium to slow speed with congestion and frequent delays.

Delays on five key routes through Middlewich have been calculated comparing Trafficmaster 2016 for AM, PM and inter-peak data to journey times calculated for free flow conditions as shown in Figure 1.2.

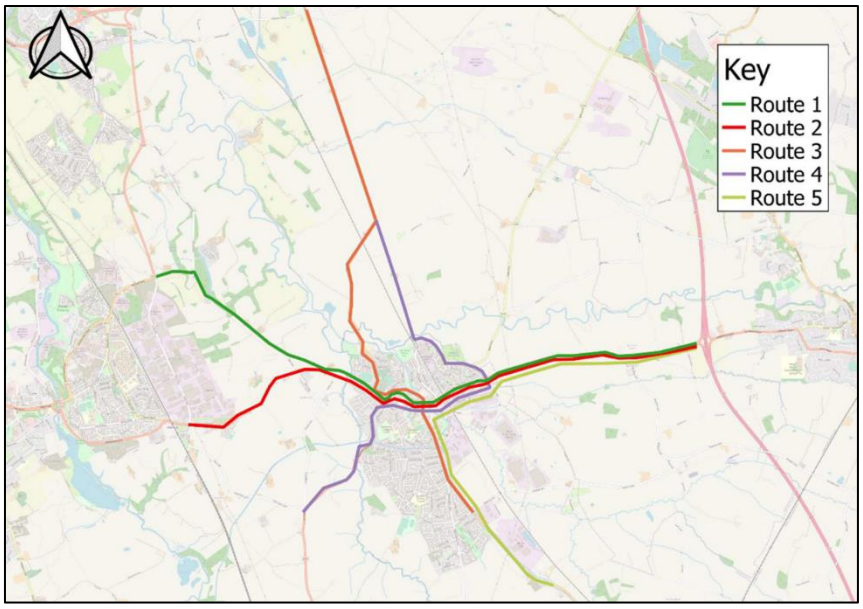

Figure 1.2 Key Routes through Middlewich

Observed delays for each route are given in Table 1.1

Route	Route 1		Route 2		Route 3		Route 4		Route 5	
Length (miles)	5		4.5		4.8		3.7		4.2	
Direction	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
Observed Delay (secs)	60	196	86	178	-5	-33	27	176	113	172
Average speed without traffic (mph)	33	33	34	30	32	32	28	32	32	32
TM 2016 average speed (mph)	30	24	29	23	32	34	26	22	25	23
Observed Delay (secs)	34	116	56	101	-9	-27	14	122	201	276
Average speed without traffic (mph)	33	33	34	30	32	32	28	32	32	32
TM 2016 average speed (mph)	31	27	30	25	33	34	27	25	22	20
Observed Delay (secs)	34	116	56	101	-9	-27	14	122	212	198
Average speed without traffic (mph)	33	33	34	30	32	32	28	32	32	32
TM 2016 average speed (mph)	31	27	30	25	33	34	27	25	22	22

Table 1.1 Observed delays on key routes through Middlewich.

Significant delays are noted on westbound journeys on the A54 between the M6 and Winsford and journeys in both directions between the M6 and the A533 south of Middlewich.

Delays are attributable to congestion in Middlewich town centre, with the principal cause of congestion being the signal-controlled junction at A54 Kinderton Street / A533 Leadsmithy Street / A54 St Michael's Way.

Queue lengths recorded in surveys in 2016 showed extensive queuing at the junction as shown in Table 1.2 with queues and slow-moving traffic affecting key side roads in the vicinity of the junction:

Maximum recorded queue length (m)		
	AM Peak	PM Peak
A54 Kinderton Street	102	114
A533 Leadsmithy Street	90	96
A54 St Michael's Way	60	78

Table 1.2 Surveyed queue lengths.

Table 1.3 shows modelled queue lengths and delays for the junction (from the Cheshire East Council Middlewich A54 St Michael's Way / A533 Leadsmithy Street (Town Bridge) Traffic Signal Junction Study December 2015):

	Mean maximum queue (M)	Delays per PCU (seconds)
A54 Kinderton Street	133	428
A533 Leadsmithy Street	116	436
A54 St Michael's Way	10	15
St Michael's Way (Offside)	52	392

Table 1.3 Modelled queue lengths and delays.

Additional traffic generated by developments or through general growth will cause delays to increase in future years. Traffic modelling undertaken in 2018 during scheme development indicates heavy congestion at this and other junctions.

1.1.1.6 Heavy Goods Vehicles

Surveys presented in Table 1.14 demonstrate that the proportion of HGVs using Middlewich's roads (4%-16%) is above typical national averages for the corresponding road types (3%-5%). This reflects proximity to the M6 motorway and the role of Middlewich's roads in providing key access between the motorway network and strategic destinations. HGV numbers are likely to expand further as goods vehicle traffic rises owing to the planned employment sites in Middlewich.

Location	Observed Proportion of HGV's	Class of Road	Annual average proportion of HGVs by class of road (from COBA manual)
MCC 5- B5081	7%	Non-Built up Principal	5.3
MCC 6 - A54 Holmes Chapel Road	16%	Non-Built up Principal	5.3
MCC 7 - A583 Booth Road	7%	Non-Built up Principal	5.3
MCC 8 - A530 Nantwich Road	4%	Built Up Principal Road	3.2
MCC 11 - A54 Chester Road	9%	Built Up Principal Road	3.2
MCC 12 - A544 Lewin Street	7%	Built Up Principal Road	3.2
MCC 16 - Warmingham Lane	2%	Non-Built up Principal	5.3

Table 1.14 Comparison of Observed HGV Proportions to the Annual Average Category Proportions By Class Of Road.

1.1.1.7 Traffic Volumes

Recent surveys underline the severity of existing congestion issues in Middlewich, with very high volumes of two-way traffic recorded passing through the town during peak morning and evening periods. This reaches around 1,300 vehicles per hour on the busiest sections. These heavy volumes overwhelmingly comprise of car commuter trips, with HGVs representing between 2% and 15% depending on the surveyed location.

Table 1.25 shows two-way AM and PM traffic flows on the main routes through the town, using traffic data collected at the 6 RSI sites in Middlewich.

Site Location	Traffic Volume	
	AM (8am-9am)	PM (5pm-6pm)
RSI 5 - B5081	424	301
RSI 6 - A54 Holmes Chapel Road	1365	1317
RSI 7 - A533 Booth Road	909	926
RSI 8 - A530 Nantwich Road	977	1017
RSI 11 - A54 Chester Road	1279	1151
RSI 12 - A533 Lewin Street	1012	1048

Table 1.25 Two-way traffic at the 6 RSI sites and permanent ATC site in Middlewich.

1.1.1.8 Safety

Observed STATS19 accident information was obtained for a complete five-year period (2015 - 2019). This period was used as this was the most up to date information available at the time of accident analysis. The severity of accidents which occurred in Middlewich between 2015 and 2019 is shown in Table 1.36.

Severity	2015	2016	2017	2018	2019
Fatal	3	2	2	4	3
Serious	22	28	22	27	10
Slight	148	129	116	105	85
Total Accidents	**173**	**159**	**140**	**136**	**98**

Table 1.36 Accident Numbers and Severity in Middlewich 2015-2019

The above data reveals a high incidence of accidents in Middlewich, including several fatalities annually. A large number of accidents were situated along the M6 and there was also a hotspot for accidents around the A54/B5309 junction.

1.1.1.9 Environmental Conditions

There is currently one Air Quality Management Area (AQMAs) that exist within Middlewich on Chester road. In Middlewich and was Implemented in 2017 to monitor levels of Nitrogen Dioxide (NO_2) within the area. Chester road is in the middle of the detailed model area.

In accordance with Part IV of the Environment Act (1995) local authorities in the UK must carry out reviews and assessments of air quality in their area. The Air Quality Strategy (Department for Environment, Food and Rural Affairs) outlines a framework for improvements and where an authority identifies an area which is likely to exceed these targets it must be declared an Air Quality Management Area (AQMA).

The predominant source of pollution across the Cheshire East Council (CEC) borough is road traffic, with emissions of nitrogen dioxide (NO2) accounting for all of the 13 Air Quality Management Areas (AQMAs) (CEC 2015). The closest AQMAs to Middlewich are approximately 3.7 km north-eastwards and 5 km south-eastwards respectively.

The 2014 Progress Report (CEC 2014) highlighted A533 Lewin Street and A54 Chester Road areas of Middlewich as having the potential to exceed the annual mean NO_2 AQO. The annual mean NO_2 AQO value of 40 µg/m3 is exceeded at two locations within Middlewich. These are site CE136 on the A54 Chester Road and site CE134 along the A533 Lewin Street where concentrations are close to the objective (albeit gradually decreasing from 2013 to 2015).

Several Middlewich town centre roads are also already highlighted as Noise Important Areas. These are

- A533, between the junctions for Canal Terrace and Sutton Lane;
- A54, east of the railway line to the roundabout connecting the B5309;
- A54, at the junction of Mill and Kinderton Street;
- Parts of the A54 between the roundabout connecting to the B5309 and the M6;
- A530 near its junction with Wheelock Street; and,
- A54 between its junction with the A530 and where the A54 crosses the River Wheelock.

1.1.1.10 Heritage and Biodiversity

There are over 35 heritage assets located within 5km of Middlewich, including archaeology, buildings, structures, and landscape types. Ecological designations include 2 Sites of Special Scientific Interest and priority habitats covered under the Natural Environment and Rural Communities Act 2006. Rivers and watercourses across the study area support protected species including otters, fish, great crested newts and invertebrates.

1.1.1.11 Landscape

Within the study area the landform slopes gently from south-east to north-west, sloping towards the River Dane floodplain in the north. Topography ranges from approximately 25 m Above Ordnance Datum (AOD) near Kinderton Hall, to approximately 50 m AOD near Tetton Hall Cottages.

There are no long-distance views of the Sandstone Ridge to the west or the Pennine Hills to the east because of the layering effect of intervening field boundary vegetation, which is caused by the relatively flat topography of the Cheshire Plain.

The study area is traversed by three tributaries of the River Dane; the River Croco, Sanderson's Brook and Small Brook. In addition to these tributaries, there is also the Trent and Mersey Canal, running parallel to the A533, and a number of smaller watercourses and ditches. The River Dane itself is located approximately 0.6 km to the north of the study area. Several ponds are found scattered within the farmland, which is characteristic feature of this Cheshire landscape. The area's relatively flat topography, meandering watercourses and field ponds are representative of the Cheshire Plain.

There is limited woodland cover across the study area. As a result, there are often open views available across the nearby Cheshire Plain, and towards the settlement edge of Middlewich. A narrow belt of riparian woodland is located alongside the River Croco, whereas Sanderson's Brook is relatively open.

Land at the eastern periphery of Middlewich represents a transitional landscape between urban settlement to the west and the more open countryside to the east. There is a wide range of land uses, which gives the landscape an urban fringe character, including industrial and commercial development (e.g., Midpoint 18), residential settlement (Middlewich), agricultural fields and isolated farmsteads. The study area is traversed by linear infrastructure including overhead power lines, the A54, B5309, A533, the Trent and Mersey Canal and the Northwich to Sandbach Railway Line.

1.1.1.12 Geology and Soils

British Geological Survey online mapping indicates that the majority of the study area is underlain by a solid geology comprising the Wilkesley Halite Member (halite-stone and mudstone) overlain by superficial deposits comprising Devensian Till (diamicton).

In the absence of site-specific post-1988 Agricultural Land Classification (ALC) data for the study area, provisional ALC data have been used to determine the agricultural quality of land within the study area. Agricultural land within the study area has been classified as Grade 3 (good to moderate quality). This data provide no delineation between Subgrades 3a and 3b and therefore where Grade 3 has been mapped; it is assumed that Subgrade 3a is present as a worst-case scenario. Under the Agricultural Land Classification system, the Best Most Versatile (BMV) land is statutorily defined as Grades 1, 2 and Subgrade 3a.

1.1.1.13 Road Drainage and Water Environment

There are five designated main rivers that flow within the study area of the proposed Route Options. These are Small Brook; Sanderson's Brook; an un-named tributary of the River Croco; the River Croco; and the River Dane. In addition, a number of ordinary watercourses flow through the study area: Trent and Mersey Canal; un-named tributary of Sanderson's Brook (1); and un-named tributary of Sanderson's Brook (2).
The risk of fluvial flooding in the study area has been interpreted from the Environment Agency's online 'Flood Map for Planning'. The Flood Map indicates that some areas within the study area are located within Flood Zone 3 and at high risk of fluvial flooding. These areas are associated with the floodplains of Small Brook, Sanderson's Brook, the River Croco, and the River Dane.

The risk of surface water flooding has been assessed from the Environment Agency's 'Risk of Flooding from Surface Water' online map. The map shows that areas of land adjacent to the watercourse channels and small, isolated pockets of land are at high risk of surface water flooding. The flood risk to areas adjacent to watercourses roughly correlates with the fluvial flood risk. The isolated pockets of land are associated with small topographic depressions in agricultural fields.
Under the Water Framework Directive (WFD), the Environment Agency classifies water bodies according to their ecological status. Water bodies are required to achieve good ecological status by 2015, or, in some cases, they are required to achieve good ecological potential by 2027 (e.g. heavily modified or artificial water bodies).

Within the study area, the Environment Agency classifies a section of Sanderson's Brook, the River Croco, the River Dane and the Trent and Mersey Canal. The WFD classifications are as follows:

- The current ecological quality of the River Croco (Waterbody ID: GB112068055460) is 'bad status' and the current chemical quality is 'good'.
- Sanderson's Brook falls under the same waterbody as the River Croco (Waterbody ID: GB112068055460), hence its current ecological quality is 'bad status' and its current chemical quality is 'good'.
- The current ecological quality of the River Dane (Cow Brook to Wheelock, Waterbody ID: GB112068060190) is 'poor status' and the current chemical quality is 'good'.
- The hydromorphological designation for the Trent and Mersey Canal is 'artificial'. The current ecological quality of the Trent and Mersey Canal, summit to Preston Brook Tunnel (Waterbody ID: GB71210247) is 'moderate potential' and the current chemical quality is 'fail'.

1.2 The Future Scenario

1.2.1.1 Future Developments

Proposed residential and employment developments contained in the Cheshire East Local Plan will generate substantial traffic growth in and around Middlewich over the coming years. Without intervention, this will drastically exacerbate congestion on the already strained road network. Traffic modelling starkly indicates widespread re-routing of traffic and localised increases in congestion hotspots as drivers seek to avoid delay.

The full list of proposed development sites (Uncertainty Log) can be found in Appendix A, this shows the developments the developments that were classified as either “Near Certain” or “More than Likely”. These developments were subsequently included in the ‘Core’ Growth Scenario for the traffic modelling and scheme appraisal.

1.2.1.2 Future Traffic Volumes

Sophisticated traffic modelling using industry-standard SATURN software has forecast traffic flow increases during all modelled peak and off-peak periods in 2026, 2041, and 2061. This conclusion remains consistent across all key routes within the model and adjoining local road network.

The base and future year matrix comparison tables for each of the three future years, are presented in tablesTable 1.47 toTable 2.69

User Class	2016 Base			2026 Forecast			% Growth		
	AM	IP	PM	AM	IP	PM	AM	IP	PM
Car Commuter	24,141	5,742	19,328	25,758	6,135	20,893	7	7	8
Car Business	5,462	4,118	5,058	5,956	4,457	5,429	9	8	7
Car Other	11,370	16,019	15,960	12,383	17,520	17,368	9	9	9
LGV	5,976	5,087	3,748	7,235	6,159	4,537	21	21	21
HGV	4,888	6,802	3,002	5,300	7,305	3,403	8	7	13
Total Car	40,973	25,879	40,345	44,096	28,113	43,690	8	9	8
Total GVs	10,864	11,889	6,750	12,535	13,464	7,940	15	13	18

Table 1.47 2026 Core and Base Year (2016) Matrix Comparison

Table 1.47 compares the 2016 base matrix to the 2026 forecast matrix. The highest level of change is evident for the LGVs, having 21% growth between 2016 and 2026.

User Class	2016 Base			2041 Forecast			% Growth		
	AM	IP	PM	AM	IP	PM	AM	IP	PM
Car Commuter	24,141	5,742	19,328	26,690	6,395	22,011	11	11	14
Car Business	5,462	4,118	5,058	6,322	4,695	5,668	16	14	12
Car Other	11,370	16,019	15,960	13,306	18,906	18,577	17	18	16
LGV	5,976	5,087	3,748	8,308	7,073	5,210	39	39	39
HGV	4,888	6,802	3,002	5,822	8,031	3,718	19	18	24
Total Car	40,973	25,879	40,345	46,319	29,996	46,256	13	16	15
Total GVs	10,864	11,889	6,750	14,130	15,104	8,929	30	27	32

Table 1.58 2041 Core and base year (2016) Matrix comparison

Table 1.58 compares the 2016 base matrix to the 2041 forecast matrix. LGV growth is also proven to be the highest growth change between these two matrices.

User Class	2016 Base			2061 Forecast			% Growth		
	AM	IP	PM	AM	IP	PM	AM	IP	PM
Car Commuter	24,141	5,742	19,328	26,990	6,436	22,285	12	12	15
Car Business	5,462	4,118	5,058	6,466	4,780	5,759	18	16	14
Car Other	11,370	16,019	15,960	14,071	20,079	19,489	24	25	22
LGV	5,976	5,087	3,748	9,783	8,328	6,135	64	64	64
HGV	4,888	6,802	3,002	5,954	8,214	3,803	22	21	27
Total Car	40,973	25,879	40,345	47,527	31,295	47,532	16	21	18
Total GVs	10,864	11,889	6,750	15,737	16,542	9,938	45	39	47

Table 2.69 2061 Core and base year (2016) Matrix comparison

Table 2.69 presents similar trends as Table 1.4**7** and Table 1.58, as when comparing the 2016 base matrix to the 2061 matrix, LGVs have the largest growth, at just under 64%.

When comparing all future year scenarios to the base, it is evident that there is an increase in traffic across all user classes and all years. As a result of the increased traffic levels forecast for the peak periods, congestion will increase at the junctions that currently experience congestion. The length of delay and duration of delays will increase.

In the Do Minimum situation (the existing transport network incorporating any future planned improvements but not the scheme), traffic accessing development sites in and around Middlewich such as Midpoint 18, and traffic on the A54 would do so via the town centre. The most notable impact of this development traffic is likely to be an increase in the amount of through traffic that inappropriately reroutes through local roads across the network in and around Middlewich, as this traffic may divert to avoid the most congested section of the town centre. Alongside this, traffic levels will also increase on roads close to the town centre.

1.2.2 Network Capacity and Capability

Complementary modelling also signals a dramatic escalation in delays at numerous junctions across Middlewich as traffic volumes ratchet up over the coming years. In turn, this suggests that overall, as time progresses, network speeds generally will decrease and in turn, journey times will increase. This will also ensure grave consequences for businesses and residents through reduced productivity, higher costs, and poorer air quality.

1.2.3 Need for Investment

The need for intervention has been identified after consideration of the traffic modelling results, which establish a significant increase in traffic flows and traffic-related issues with likely negative impacts on Middlewich and the wider area. This congestion has created a need for a bypass to allow north-south traffic to access the local development sites and destinations further afield whilst avoiding the town centre.

During the development of the Cheshire East Local Plan, issues that are impacting on local business growth were identified. The Local Plan aims to create the conditions for greater prosperity. In transport terms, this centres on the removal of barriers to doing business, especially congestion and poor journey-time reliability.

It is important that all issues impacting local areas are well understood and an appropriate intervention is identified. In the following chapters, further evidence is presented on the problems arising in Middlewich and the surrounding areas.

1.2.4 Impact of Not Changing

If the status quo continues without meaningful upgrades to Middlewich's road network, the following repercussions are certain to unfold:

- Traffic levels will further intensify as development proceeds, crippled by heightened congestion and delay;
- Motorists will reroute through inappropriate residential roads and rat runs to avoid congestion hotspots;

- Community severance and road safety hazards will worsen for pedestrians and other non-motorised users;
- Businesses will suffer falling productivity and logistics efficiency as journey times increase;
- Air quality and noise pollution will degrade as queues lengthen, with AQMAs likely to be declared;
- Attracting new inward investment and development will become increasingly difficult; and
- The Cheshire economy overall will thus fail to reach its growth potential.

The Investment Proposal

1.2.5 The Scheme

The Scheme involves the construction of a new single carriageway road, known as the Middlewich Eastern Bypass. The proposed route of the Scheme follows a north-south alignment to the east of Middlewich, providing a new route between the A54 Holmes Chapel Road and the A533 Booth Lane to the south of Middlewich. It is located within Cheshire East, with the exception of a small area of the northern section of the road, which extends into the borough of Cheshire West & Chester.

The Scheme sits on the eastern edge of the Middlewich Settlement Zone and will provide traffic routes to avoid Middlewich town centre, relieving congestion and contributing strongly to the delivery of objectives within the Local Plan Strategy of supporting the economic growth agenda for Middlewich and the sub-region, with aims for up to 1,950 new dwellings and c.6,500 additional jobs in the town. Policy PG7 of the Local Plan states that Middlewich is expected to accommodate development of 70 ha of employment land and the bypass is required to release a substantial proportion of this land.

Delivery of the Scheme is noted in the Local Plan Strategy which states: 'The timely delivery of the Middlewich Eastern Bypass is key to ensuring that Middlewich realises its full sustainable growth potential as a Key Service Centre and also contributes to the prosperity of the borough as a whole'.

The Local Plan Strategy then states that the bypass is: 'a key piece of infrastructure vital to the future prosperity of Middlewich, Cheshire East and the wider region'.

Within the Local Plan Strategy, the Scheme is linked specifically to the Midpoint 18 Business Park (LPS 44, also branded as Magnitude), providing a suitable means of access to significant inaccessible areas of the allocated site. An approved route for Middlewich Eastern Bypass is shown in the Local Plan Strategy., though it should be noted that this route is based upon a previously consented scheme formed the proposed bypass at the time that the Local Plan Strategy was adopted. A new preferred scheme following a different route has subsequently been developed and granted planning permission under references 18/5883C and 18/04483/FUL (by the Local Planning Authorities of Cheshire East Council and Cheshire West & Chester Council respectively) in 2019.

The Scheme is also proposed to be safeguarded under Policy INF 6 in the Revised Publication Draft Site Allocations and Development Policies Document (SADPD) produced by the Council to support the policies and proposals of the Local Plan Strategy. The revised draft plan was subject to public consultation during November and December 2020 and subsequently updated.

Cheshire East Council is the main Local Planning Authority (LPA) responsible for granting planning consent for the Scheme, but Cheshire West and Chester Council is also responsible for planning consent for the works associated with the Scheme within their administrative area.

Cheshire East Council is the Local Highway Authority (LHA) responsible for maintaining the public highway in the Borough and they will also maintain the scheme where it lies within the Borough of Cheshire West & Chester via a Section 8 Agreement under the Highways Act 1980.

1.2.6 Options

Comprehensive assessment criteria were established covering all critical factors - strategic, economic, commercial, financial, management and deliverability aspects. Both quantitative and qualitative appraisal was undertaken based on these criteria.

Two leading options - Alternative 1A and Preferred 2A - were shortlisted and analysed in depth as part of the public consultation exercise. Further refinements responding to consultation feedback have led to Option 2A being conclusively confirmed as the Preferred Route, with Alternative 1A retained as a sub-optimal fallback option.

1.2.7 Need for the Scheme

1.2.7.1 Local and Regional Need

The Scheme is promoted by the Acquiring Authority as a means of relieving congestion in Middlewich, improving journey time reliability on the existing wider highway network, directly facilitating the development of the LPS 44 (Midpoint 18) strategic employment site, and indirectly facilitating other traffic generating developments such as LPS 43 (Brooks Lane) in the Local Plan Strategy, as discussed in section 4, through improvements to the wider highway network.

Additional connectivity benefits from the Scheme are realised by mitigating traffic congestion in the town and relieving delays on strategic roads linking the mid-Cheshire towns, especially Middlewich, Winsford and Northwich via the A54 to the national motorway network at M6 Junction 18.

As mentioned above, the Local Plan Strategy states that the Scheme is: 'a key piece of infrastructure vital to the future prosperity of Middlewich, Cheshire East and the wider region.'

The Local Plan Strategy states that Middlewich has been identified as one of the Key Service Centres for the Borough, and, as such, the vitality and growth of the town contributes to the prosperity of the Borough as a whole.

The timely delivery of the Scheme is identified in the Local Plan Strategy as key to ensuring that Middlewich realises its full sustainable growth potential as a Key Service Centre and also contributes to the prosperity of the Borough.

1.2.7.2 HS2

The Middlewich Eastern Bypass will better link Middlewich to the proposed HS2 Hub Station at Crewe, improving access to both the Strategic Rail network and the economic growth opportunities linked to HS2.

The Hybrid Bill for Phase 2a of the HS2 Scheme has received Royal Assent and, on current plans, passenger services for Phase 2a are expected to commence at Crewe between 2029-2031.

The HS2 Phase 2b Hybrid Bill is currently before Parliament for consideration. Subject to the Bill receiving Royal Assent, construction of Phase 2b of the HS2 line (From Crewe to Manchester) will start in approximately early 2027 and complete between 2035 and 2040.

HS2's published plans for the proposed North Crewe Rolling Stock Depot at Wimboldsley show a network-significant facility located less than 3km west of Middlewich. The depot is connected to the national motorway network at M6 Junction18 via A530/A54 through Middlewich town centre. HS2's published plans also show extensive construction areas for the HS2 mainline and associated features, including extensive diversions to existing highway infrastructure to the north, west and south of Middlewich.

HS2 predicts that there will be a significant number of HGV movements using the A54 through Middlewich, with the HS2 construction areas located north and west of Middlewich connected to the national motorway network at M6 Junction18 via the A54 through Middlewich town centre.

HS2 Ltd has assumed in the Transport Assessment for the Hybrid Bill, and subsequent Additional Provision 1 (which includes further changes to HS2 proposed scheme and construction methodology), that the Scheme is delivered and available for use by the time HS2 Phase 2b construction activities are underway. HS2's transport modelling is, therefore, predicated on the Scheme being open prior to any works commencing.

Construction traffic associated within the HS2 construction areas is highly likely to experience delays and congestion within the town centre if the Scheme is not delivered. The Council has undertaken its own assessment of the impacts of HS2 construction traffic and initial assessment has indicated that, in the absence of the Scheme and without additional mitigation measures (including additional improvement works to existing highway infrastructure), HS2 related construction traffic would generate even greater levels of congestion and severance on the A54 through Middlewich, as well as intensification of traffic on lower standard roads.

Without the Scheme, operational traffic associated with the depot is highly likely to experience greater levels of delay and congestion within the town centre, leading to sub-optimal performance at the facility.

Therefore, the opportunities to alleviate congestion in Middlewich and mitigate the associated traffic impacts of HS2 Phase 2b, would be an important influence on the successful construction and future operations of

HS2 in Cheshire East, a critical element in delivering the Government's vision of a Northern Powerhouse to revitalise the north and rebalance the UK economy.

1.2.7.3 Traffic Problems and Issues

Traffic modelling undertaken for the development of the Scheme has shown that with background growth in traffic and the inclusion of traffic from planned development for Middlewich, the traffic levels in future will be significantly higher than existing, leading to increased congestion.

Increased congestion would exacerbate all current traffic related problems within the town described in section 5, with the key junction at A54 Kinderton Road / A533 Leadsmithy Street operating over operational threshold capacity in the AM peak and significantly beyond maximum capacity in the PM peak.

Impacts on through routes have been analysed and further increases in journey times (delays) are predicted. The most heavily affected route is northbound from A533 Booth Lane to M6 J18 which increases by 5 minutes and 43 seconds in the short term and by 16 minutes and 15 seconds in the long term.

1.2.7.4 Bus Services

Increased congestion and delay will directly impact bus services as there are no segregation or prioritisation opportunities on the existing road network.

1.2.7.5 Traffic Related Environmental Issues

Increases in traffic are forecast on all routes which are currently designated Air Quality Management Areas or Noise Important Areas. Traffic increases will cause a worsening of air quality and an increase in noise.

1.2.7.6 Safety

If no improvements are made, the increase in traffic levels on the A54, A530 and A533 within Middlewich will cause key junctions to operate over capacity creating long delays. There is a risk that to avoid the congestion, drivers will increasingly use residential streets between A533 Booth Lane and A530 Nantwich Road and unclassified roads between A533 Booth Lane and A54 Holmes Chapel Road as alternative routes to mitigate delays. Re-assignment of traffic to roads that are not suitable would be expected to lead to a reduction in road safety for all categories or users. The specific safety hazards for pedestrians and other non-motorised users associated with the narrow section of Lewin Street would be made worse with increases in traffic.

1.2.7.7 Employment

Local Plan Strategic Sites at Midpoint 18 and Brooks Lane will provide employment opportunities through the development of a range of uses including logistics, manufacturing, leisure and retail facilities, together with providing up to 200 houses. However, these sites cannot be fully developed without measures to enhance the road network.

LPS 44 (Midpoint 18) is approaching the current limits of development capacity. Recent and current planning applications and consents leave no opportunities for significant further development on the accessible part of the site to the north of Cledford Lane. Without the Scheme the area of site south of Cledford Lane is inaccessible to anything other than light vehicles from existing roads and will remain undeveloped.

LPS 43 (Brooks Lane) is land-locked by the Trent and Mersey Canal, the Sandbach to Northwich Rail Line and the Cledford Lime Beds, a Site of Biological Importance. Access to and from the site is constrained to be from the A54 Kinderton Street which suffers from significant congestion and is a cause of traffic queuing to leave the site. A worsening of existing traffic conditions will reduce the appeal of the site to developers.

1.2.8 **Objectives of the Scheme**

1.2.8.1 Strategic Review

In 2015, the Acquiring Authority undertook a strategic review of the bypass which involved an assessment of a series of route options for delivery of an eastern bypass. This process involved a review of the strategic aims and objectives for the bypass and was undertaken in conjunction with key stakeholders. It was also informed by new and updated local, regional and national initiatives and took account of all Draft Local Plan Strategy objectives for Middlewich.

This process cumulated in the preparation of a Strategic Dimension for the Scheme which was adopted by the Acquiring Authority in May 2016, and which was used for route selection studies and in the selection of the preferred option for the Scheme.

The Acquiring Authority's primary aim in developing the Scheme was stated simply in the Strategic Dimension approved by Cabinet in May 2016 as 'To deliver a scheme which functions as a bypass and delivers a long-term sustainable traffic solution for Middlewich'.

Implicit within the primary aim were considerations relating to the quality of the provision and route standards, alleviation of traffic congestion on the local highway network, alleviation of road safety concerns on the local highway network and impacts on non-peak journeys in terms of distance travelled and time taken.

In addition to functioning as a bypass, the Scheme was required to deliver positive outcomes with respect to 10 key requirements that were identified through internal consultations within the Acquiring Authority.

The requirements are listed below with additional narrative to give context:

Fulfilling delivery of the Local Plan

The bypass needed to be capable of enabling the delivery of the Local Plan with particular emphasis on the creation of employment through development of Midpoint 18 and other strategic sites, and housing commitments to support growth of the area.

Delivery of further development opportunities

The bypass needed to be capable of delivering or enabling development opportunities beyond those contained in the Local Plan thereby providing longer term growth benefits to Middlewich.

Facilitation of High Growth City objectives associated with HS2 (Northern Gateway)

High Growth City objectives associated with HS2 include the Northern Gateway which requires improved highway access to Crewe from M6 J18 to the north. The bypass needed to be a key component of the Northern Gateway.

Facilitation of an east to west bypass (future strategic highway development)

Whilst an east – west route is not current Council Policy, a more direct route from M6 J18 to Winsford Middlewich Road in the future may be desirable or even essential. The bypass route needed to facilitate, and no event hinder the future development of a strategic east-west link providing improved linkage between M6 J18 and Winsford

Connectivity with Cledford Lane

Cledford Lane provides access to a number of properties to the east and west of the bypass, and whilst minor and non-strategic in nature, connectivity in each direction between the bypass and Cledford Lane was required.

Delivery of a new railway station site for Middlewich

A new railway station for Middlewich anticipated either within Midpoint 18 or in the Brooks Lane regeneration area will require highway access and the bypass needed be capable of delivering a suitable standard of access taking into consideration demands for park and ride and linkage for other modes of transport.

Facilitating further rail opportunities

Further rail opportunities associated with the chord line running from Sandbach to Northwich on the boundary of the Midpoint 18 site, associated with HS2 facilities (freight services relocation from Crewe), rail based manufacturing, and multi-modal facilities development were considered by virtue of the ability of the bypass to support any or all opportunities. The potential for effective highway linkage to the bypass is an essential enabler for rail-based development opportunities.

Speed of delivery

Speed of delivery of the scheme is of fundamental importance in relieving traffic congestion, alleviating road safety concerns and generating the benefits for Middlewich and Cheshire East associated with the Local Plan. Options were considered based upon the scale and complexity of works required as an indicator of anticipated time for implementation.

Environmental impacts

Cumulative impacts from the scheme on habitats & species (including a nationally-significant population of lesser silver diving beetles) were considered based upon initial surveys and identified constraints.

Cost and effectiveness of environmental mitigation

Closely linked to environmental impacts are the mitigation works required and their cost effectiveness. Key determinants considered included impacts on watercourses, number of ponds impacted and degree of

severance of species communities by the options, and hedgerow impacts based upon measurement of hedgerows lost and potential significance.

All options fulfilled the strategic case requirements and an assessment process which enabled a Preferred Option to be selected.

1.2.8.2 The Scheme Objectives

The Scheme Objectives, formed from a refinement of the strategic case requirements, and as listed below, address the needs for the Scheme, for compliance with the broad objectives of the previous and current Cheshire East Local Transport Plans (current LTP adopted October 2019), and for specific access opportunities to maximise the benefits of The Scheme to Middlewich.

- Relieve traffic congestion and reduce road safety concerns in the town centre;
- Help deliver the Local Plan, to create opportunities for new business and employment in Middlewich;
- Help deliver the Local Plan sites for new housing in Middlewich;
- Help unlock more development opportunities in the future;
- Provide suitable access to Cledford Lane and Booth Lane from the bypass;
- Provide facilities for pedestrians and cyclists;
- Reduce any negative environmental impacts of the scheme.

1.2.8.3 How the Scheme Objectives are met

Relieve traffic congestion and reduce road safety concerns in the town centre

By providing a new route between the A54 Holmes Chapel Road east of Middlewich and A533 Booth Lane south of Middlewich, congestion through the town centre will be reduced by removing the proportion of traffic that currently uses the A533 to travel south towards Sandbach and Crewe or north from Crewe and Sandbach. This is estimated from modelling outputs to be circa 30% reduction of the total traffic through the Middlewich town centre.

The traffic will divert onto the Scheme which will form a quicker and more direct route with fewer junctions and higher speed limits.

Removal of this traffic from the total passing through the town centre will enable existing junctions to operate within capacity removing the causes of congestion.

The Scheme will provide a suitable route for HGV traffic enabling it to avoid the narrow sections of road on Lewin Street improving safety for all road users, but particularly for pedestrians.

Help deliver the Local Plan, to create opportunities for new business and employment in Middlewich

The Scheme will:

- Provide access to the remaining areas of LPS 44 (Midpoint 18) located to the south of Cledford Lane and, therefore, enable development of the full site allocation.
- Reduce congestion on A54 Kinderton Street within the vicinity of the junction with Brooks Lane releasing capacity in the highway network to support the redevelopment of LPS 43 (Brooks Lane).
- Provide improved access to the former RHM Foods ‘Bisto’ Site for redevelopment and, therefore, increase its attractiveness to occupiers and developers.

Help deliver the Local Plan sites for new housing in Middlewich

LPS 42 (Glebe Farm) and LPS 45 (Warmingham Lane) are located to the south of Middlewich. Delivery of the bypass will reduce traffic congestion on the adjacent section of A533 Booth Lane and provide the sites with access to a high standard route to the M6. Traffic wishing to head west towards Winsford and Chester will benefit from improved journey times through Middlewich town centre resulting from reduced congestion.

Both sites submitted outline planning applications which were recommended for approval subject to S106 agreements ahead of DfT approval of the Outline Business Case for the bypass. Following approval, each application has been consented with developers having agreed terms for the S106 agreements, and Glebe Farm currently has reserved matters and discharge of planning conditions applications pending.

The creation of employment at Midpoint 18 and Brooks Lane would increase the demand for new housing in Middlewich.

Help unlock more development opportunities in the future

Key features of the bypass have been designed to maximise the potential for future connectivity with the A530 via the proposed southern link and the creation of an alternative route to Winsford (avoiding Middlewich town centre).

A southern link would provide high standard highway access to land which is currently inaccessible and would promote the possibility of further development to the south of Middlewich beyond the current Local Plan. Development of a southern link is currently at Strategic Outline Business Case stage and is being studied collaboratively by the Council and Cheshire West & Chester Council, with support from the Cheshire and Warrington Local Enterprise Partnership.

Provide suitable access to Cledford Lane and Booth Lane from the bypass

The Scheme will connect with Cledford Lane via a roundabout junction enabling east-west access. Access from the west will enable traffic from the Council's Environmental Hub site and from the adjacent British Salt site on Cledford Lane to access the Scheme directly further reducing traffic on the A533 and through the town centre.

Booth Lane will connect with the Scheme via a roundabout junction, providing a high standard of connectivity. A new bridge will be constructed over the Trent and Mersey Canal future proofing the route against long term structural deterioration of the existing bridge over the canal.

Provide facilities for pedestrians and cyclists

A 3m wide dual use cycleway footway will be created on the western side of the bypass over its full length and carefully connected to existing facilities at each end of the Scheme to provide a high standard of facility for pedestrians and cyclists.

Improvements will also be undertaken on Cledford Lane to segregate pedestrians and cyclists from vehicular traffic and strengthening its function as part of Regional Cycle Network Route 71.

Mitigate any negative environmental impacts of the Scheme

Whilst it is more of a key requirement than an objective in the truest sense, the environmental impacts have been carefully assessed and following initial screening and scoping a full Environmental Impact Assessment was undertaken for the scheme with the production of an Environmental Statement as part of the planning application.

Where significant impacts to ecological features have been identified, additional mitigation measures to avoid, reduce or compensate for such impacts have been identified and will be implemented to address the impacts. The effects of habitat loss and direct mortality on species will be mitigated by:

- Creation of alternative habitat areas, including new ponds for Lesser Silver Water Beetle and toads;
- Financial contribution to the work of the Cheshire Barn Owl Group to support conservation of the species remote from the scheme;
- Creation of bat hop overs, and the provision of bat boxes;
- Creation of a reptile connectivity corridor;
- Mammal tunnels installed under the road;
- Inclusion of mammal ledges within culverts;

- The installation of nest boxes for Kingfisher; and
- The installation of temporary and permanent badger fencing in key locations.

The areas of habitat creation and enhancement will be subject to continued monitoring and management to ensure they are successful. After 15 years it is anticipated that residual impacts to all the important ecological features identified above would be neutral once habitat creation works have had time to establish and mature.

The Scheme provides a net biodiversity gain through onsite mitigation and habitat creation on land contained within the CPO and forming part of the planning consent. In the event that the Scheme landtake can be reduced by way of the section 73 consent being granted, the Scheme will provide a minimum of 10% net biodiversity gain through offsite mitigation, agreed with the Cheshire Wildlife Trust.

Other environmental mitigation that will be included in the scheme includes extensive landscaping to reduce visual impacts and discrete lengths of acoustic fencing to mitigate noise impacts.

1.2.9 Strategic Benefits

The implementation of a bypass at this point in the Strategic Road Network (SRN) will produce large strategic benefits as there will be an overall improvement to journey times and delay in and around Middlewich.

The Middlewich Eastern Bypass will also better link Middlewich to the proposed HS2 Hub station at Crewe which will improve access to the strategic rail network as well as facilitating growth in the Northern Gateway Development Zone around Crewe and improving access to the motorway network.

1.2.10 Strategic Benefits & Policy Considerations

The Middlewich Eastern Bypass also strongly aligns with and furthers the objectives and priorities contained in local, sub-regional and national policies and plans:

1.2.10.1 Local Policy:

- This scheme is integral to facilitating employment-led growth in Middlewich as envisaged in Cheshire East's Local Plan.
- It is explicitly identified in the Local Plan and Infrastructure Delivery Plan as a project to relieve congestion.
- It strongly supports the Local Transport Plan objectives to reduce congestion, improve reliability and support growth.

1.2.10.2 Sub-Regional Policy:

- Aligned with the Cheshire and Warrington Strategic Economic Plan by acting as a key enabler for delivering growth.
- Improves connections between Mid Cheshire and the areas of Crewe and Greater Manchester.

1.2.10.3 National Policy:

- This scheme encourages economic growth and addresses congestion - aligning with priorities in the National Planning Policy Framework.
- Supports aims in DfT's Transport Investment Strategy to improve journey times, alleviate congestion, and facilitate housing and employment growth.
- Contributes to development of the Northern Powerhouse and objectives for strategic transport networks identified by Transport for the North.

1.2.11 Key Stakeholders Views and Requirements

1.2.11.1 Local Petition

There is overwhelming, strong support, of long standing, from the residents and local businesses for the bypass. The support has grown significantly over the years as the congestion in Middlewich has worsened. The last attempt to construct the Scheme was in 2008 and was developer-led and there were earlier attempts by Cheshire County Council to construct a bypass. Evidence of residents' support was demonstrated by a local petition to "build the bypass first" which collected 2201 signatures in 2015.

1.2.11.2 MP Support

The local Member of Parliament has been particularly active in supporting the Scheme. Fiona Bruce MP raised the need for the bypass twice in the House of Commons during the development of the project. On the second occasion speaking for a full ten minutes.

At OBC stage a letter of support for the scheme was provided by the then Chancellor of the Exchequer George Osborne.

Local MP support for and interest in the scheme remains high.

1.2.11.3 Stakeholders

The project team have had close liaison with relevant councils and groups in the area in order to consider their views.

The main stakeholder groups for the Middlewich Eastern Bypass are:

- Cheshire East Council – CEC are overseeing and are responsible for this scheme.
- Cheshire West & Chester Council – neighbouring local authority whose boundary with Cheshire East is a short distance from the edge of Middlewich town.
- Cheshire and Warrington Local Enterprise Partnership – Aim to promote growth in the region and determine local economic priorities.
- Local community groups – Public consultation events were held in August and September 2016 and March and April 2018, in order to inform the preferred route. A leaflet which outlined the scheme objectives, Bypass options and comparisons and details of how to provide feedback were posted to stakeholders as well as each household within Middlewich. The stakeholders included any organisation or body that was identified who may be affected by the scheme or who was thought to have an active interest.
- Local employers – The bypass will benefit employers, through enhanced opportunity from relived congestion. Employers may also be involved in consultation.
- Local developers – The scheme is of interest to developers of other projects, as access to the scheme in future may affect other projects.
- Town and Parish Councillors – As locally elected representatives, they are a point of contact for local residents who live near the proposed routes of the bypass. The consultation process began in August/September 2016 and continues with regular briefings and updates.

1.2.12 Options

Comprehensive assessment criteria were established covering all critical factors - strategic, economic, commercial, financial, management and deliverability aspects. Both quantitative and qualitative appraisal was undertaken based on these criteria.

Two leading options - Alternative 1A and Preferred 2A - were shortlisted and analysed in depth as part of the public consultation exercise. Further refinements responding to consultation feedback have led to Option 2A being conclusively confirmed as the Preferred Route, with Alternative 1A retained as a sub-optimal fallback option.

The Preferred Option involves a new single carriageway road constructed to current standards, bypassing Middlewich from east to south. It connects the A54 and A533 strategic roads via a new junction at Pochin Way, avoiding the heavily congested town centre. The route maximises local benefits while minimising environmental impacts through avoiding key constraints.

2. Economic Dimension

2.1 Introduction

The Economic Dimension presents the extent to which the Middlewich Eastern Bypass (MEB) would be beneficial to the UK economy and whether it represents Value for Money (VfM). The economic case has been prepared in accordance with the DfT's Transport Analysis Guidance (TAG) documents. TAG is the guidance that is used to assess transport schemes in accordance with the requirements of HM Treasury's Green Book, which is used across government for investment decisions through identification, selection and appraisal of options.

In line with HM Treasury's appraisal requirements, the impacts considered are not limited to those directly impacting on the measured economy, nor to those which can be monetised. The economic, environmental, social and distributional impacts of a proposal are all examined, using qualitative, quantitative and monetised information. In assessing Value for Money, all of these are consolidated to determine the extent to which a proposal's benefits outweigh its costs.

The economic appraisal is discussed under the following headings:

- Methodology
- Assumptions
- Scheme Cost for Economic Assessment
- Assessment of Monetised Benefits
- Assessment of Non-Monetised Benefits
- Assessment of Distributional Impacts
- Assessment of Wider Economic Benefits
- Value for Money Assessment
- Conclusions

2.2 Methodology

2.2.1 Overview

Industry standard approaches have been used to calculate and define the relative benefits of the MEB scheme using DfT approved software packages, namely TUBA and COBA-LT, using the output from the SATURN traffic model and DIADEM Variable Demand Model (VDM).

The Value for Money assessment is a staged process which includes appraisal of the scheme's economic, environmental, social, distributional and fiscal impacts using qualitative, quantitative and monetised information.

It starts with the assessment of monetised costs and benefits and calculation of the Benefit Cost Ratio (BCR) of the Scheme. The next stage is to capture and analyse those impacts which cannot be monetised but can be presented as qualitative information. Finally, it looks at how the impacts of the scheme are distributed across different social groups - the Distributional Impacts assessment. The processes used for the Economic Assessment for the MEB scheme are outlined in Figure 2.1 below.

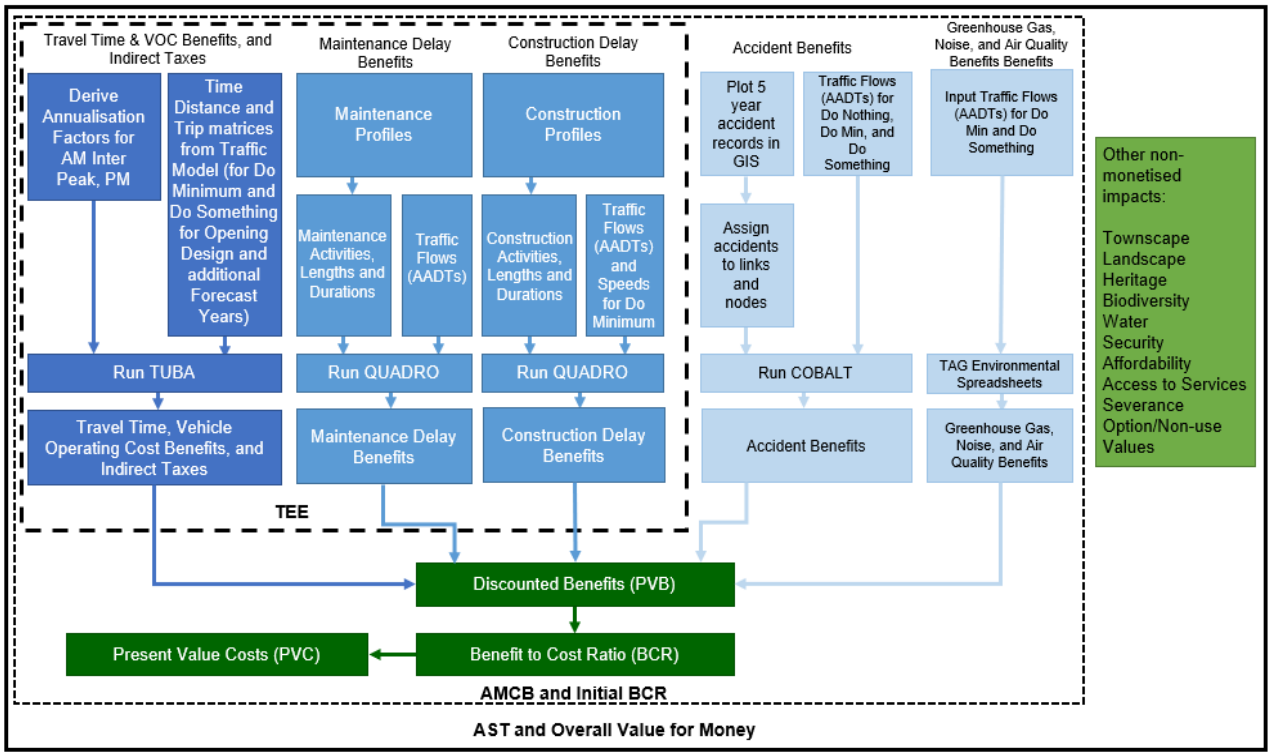

Figure 2.1 Economic Assessment Process

2.2.2 Assessment of Monetised Impacts and Costs

In line with DfT guidance, Value for Money assessment starts with the calculation of those impacts that can be expressed in monetary terms. These monetised impacts are derived and summed to generate a Present Value of Benefits (PVB).

The total costs are also summed to construct the Present Value of Costs (PVC).

The monetised scheme benefits and costs are used to calculate a Benefit Cost Ratio (BCR) – that is the amount of benefit being delivered for every £1 of cost. The BCR is calculated by dividing the Present Value of Benefits (PVB) by the Present Value of Cost (PVC).

The summary of the monetised information along with the BCR is presented in the standard Assessment of Monetised Costs and Benefits (AMCB).

The following monetised impacts have been included in the economic assessment and are presented in the AMCB Table:

- TEE - Travel time benefits as a result of the scheme;
- Vehicle Operating Cost;
- Accidents;
- Greenhouse Gases emissions;
- Air Quality and Noise;
- Changes in Indirect Taxes;
- TEE - Delays during Maintenance; and
- TEE - Delays during Construction (N.B. This is always a dis-benefit and is therefore recorded as a negative benefit).

2.2.3 Assessment of Non-Monetised Impacts

The second stage of the Value for Money assessment builds on the initial monetised costs and benefits and considers qualitative and quantitative information on those impacts which cannot be monetised and how these contribute to the Value for Money of the scheme.

The impacts which cannot be monetised, but which have been appraised for the scheme and given an overall qualitative assessment score are listed below:

- Regeneration Benefits;
- Impacts on Landscape;
- Impacts on Townscape;
- Impacts on Historic Environment;
- Impacts on Biodiversity;
- Impacts on Water Environment;
- Impacts on Physical Activity;
- Impacts on Journey Quality;
- Impacts on Security;
- Impacts on Access to services;
- Impacts on Affordability; and
- Impacts on Severance.

The assessment of non-monetised impacts has been undertaken in accordance with the methodology recommended within the relevant TAG units.

The results of the assessment of non-monetised impacts have been summarised within the Appraisal Summary Table (AST).

2.2.4 Assessment Tools

In accordance with guidelines outlined in TAG, the following industry standard software packages have been used to conduct the economic appraisal:

- Transport User Benefit Appraisal (TUBA) - Version 1.9.17 – primarily used to derive travel time and Vehicle Operating Cost (VOC) benefits and to assess the economic effects of construction.
- Cost and Benefit to Accidents – Light Touch (COBA-LT) - Version 2013.2 - used to derive the accident benefits.

Table 2-1 below, indicates the methods used to assess each of the elements.

Element of Assessment	Assessment Method
Travel Time Benefits	TUBA
VOC Benefits	TUBA
Indirect Tax	TUBA
Accident Benefits	COBA-LT
Maintenance Delay Benefits	QUADRO
Construction Delay Dis-benefits	TUBA
Environmental Impacts (Air Quality, Noise, Greenhouse Gases)	TAG Worksheets

Table 2-1 Approach to Elements of Economic Assessment

2.3 Assumptions

2.3.1 Overview

This section summarises the key assumptions supporting the Value for Money assessment. This includes the assumptions set out in TAG as well as further assumptions specific to the MEB scheme.

2.3.2 Traffic Model

The impact of the proposed scheme is based on the differences between forecasts of the Do Minimum (without scheme) and Do Something (with scheme) scenarios. These forecasts have been developed within the MEB Traffic Model which consists of a SATURN Highway Model and DIADEM Variable Demand Model (VDM).

Full details of the MEB Traffic Model and the DIADEM VDM can be found in the Local Model Validation Report and the Traffic Forecasting Report.

2.3.3 Time Periods

The following time periods were modelled in the traffic model:

- Morning (AM) weekday peak hour between 07:45 and 08:45;

- An average inter-peak weekday hour between 10:00-16:00; and
- Evening (PM) weekday peak hour between 17:00 and 18:00.

Appropriate assumptions have been made regarding the annualisation of these benefits (i.e. converting from one-hour traffic models to produce benefits for a full year). Further details of the use of the traffic model to inform the economic assessment can be found in the scheme's Economic Assessment Report (EAR).

The weekday off-peak (19:00-07:00), weekends and Bank Holidays have not been modelled as those periods would not add significant benefits to the appraisal due to lower levels of traffic. Excluding the off-peak and weekend benefits ensures a conservative approach and is consistent with latest TAG guidance, which recommends not including benefits from non-modelled periods.

2.3.4 User Classes

As per TAG guidance, the traffic model splits the traffic flows into different vehicle categories and different journey purposes for each modelled year. The future year matrices consist of the following user classes:

- User Class 1: Cars Commuting.
- User Class 2: Cars Business.
- User Class 3: Cars Other.
- User Class 4: Light Goods Vehicles (LGVs).
- User Class 5: Heavy Goods Vehicles (HGVs).

Where possible this has allowed benefits to be calculated individually for separate journey purposes as shown in TEE and AMCB tables.

2.3.5 Appraisal Period

In line with TAG guidance, the impacts of the scheme have been assessed over the 60-year period after the scheme opens. After the final forecast year, the results of the model have been extrapolated to cover the whole appraisal period of 60 years, but with no further traffic growth assumed beyond the final forecast year.

2.3.6 Discounting and Units of Accounts

Costs and benefits occur in different years throughout the assessment period, e.g. the scheme development and construction costs occur before the scheme opens, whilst the benefits occur over the DfT standard appraisal period of 60 years.

In addition, it is considered that benefits that accrue now are considered to be more valuable than those that accrue further into the future. Consequently, in order to compare benefits and costs it is essential that they are all converted to a common base and a common value (known as the Present Value Year).

The process used is called discounting and the Present Value Year, as per DfT guidance, is currently 2010. Discounting is undertaken internally within the software programmes that have been used, using the standard DfT discount rates of 3.5% per year for the first 30 years of appraisal and 3.0% per year thereafter.

The unit of account must also be consistent between costs and benefits in order to allow comparison between the two. There are two different units of accounts:

- Market price unit of account – this refers to the prices paid by consumers for goods and services and therefore includes indirect taxation (e.g., VAT); and
- Factor cost unit of account – this excludes indirect taxation. Prices paid by Government bodies are usually quoted in the factor cost unit of account as any tax paid is recovered by the Government and is therefore ignored.

While scheme benefits are calculated in market prices, scheme costs are usually quoted as factor costs. The scheme costs must therefore be adjusted to market prices for economic assessment purposes – this is done within the economic assessment software.

2.3.7 Inflation

Costs can also be in different price bases. To enable comparisons to be made between such costs and to take account of the effect of inflation all monetary values in the calculation of costs and benefits are adjusted so that they are all in a common price base of 2010.

2.4 Scheme Cost for Economic Assessment

Along with the estimation of benefits, the costs are also required for the economic assessment of the scheme.

Costs can be defined as the total amount of money spent on constructing and maintaining the scheme. The costs are therefore referred to as Scheme costs and Maintenance costs:

- Scheme costs are construction costs, land costs, preparation costs (planning and designing the scheme) and supervision costs during the scheme construction.
- Maintenance costs are the cost of people, machinery and materials required to maintain the highway network. These costs are also known as the Capital Costs of Maintenance.

Base costs for construction, land / property, preparation / administration and supervision, including adjustment for risk are based on the scheme design.

When the scheme is in place, the bypass will require additional maintenance that would not occur if the scheme was not built. Typical road maintenance profiles with the scheme in place were assumed. The cost of these maintenance activities was then derived based on Part 2, Chapter 4 of the QUADRO manual.

Prior to using the base scheme costs in the Economic Assessment, as per DfT guidance TAG (Unit A1-2), the base costs have to be adjusted to account for measured risks and optimism bias.

A risk assessment was completed collectively by Cheshire East Council and Jacobs and Balfour Beatty as the Councils Contractor. The risks include all types of risk which could affect the cost of the scheme such as political decisions, land acquisition issues and legislative delays. For each risk, an estimate was made of the likelihood of the risk occurring and the associated financial impact. Based on the risk assessment, a risk allowance has been included within the scheme costs.

In accordance with DfT guidance an optimism bias uplift factor of 3% has been applied to the scheme costs for the purposes of the economic assessments that follow. This is in line with a highways scheme at the Full Business Case stage.

In line with TAG requirements, any 'sunk' costs that have already been spent have been excluded from the costs used in economic assessment.

The undiscounted outturn scheme costs with risk and 3% optimism bias are presented in Table 2-2 below.

Cost Element	Cost £m	Risk	Inflation	Sub-Total Incl Risk & Inflation	Optimism Bias (3%)	Total
Construction	£47.1m	£5.3m	£2.1m	£54.5m	£1.6	**£56.1m**
Land	£19.2m			£19.2m	£0.6m	**£19.8m**
Preparation	£15.1m			£15.1m	£0.5m	**£15.6m**
Supervision	£3.5m			£3.5m	£0.1m	**£3.6m**
Developer Contributions	-£22.8m			-£22.8m	-£0.7m	**-£23.5m**
Maintenance	£3.5m			£3.5m	£0.1m	**£3.6m**
Total	**£65.6m**	**£5.3m**	**£2.1m**	**£73.0m**	**£2.2m**	**£75.2m**

Table 2-2 Undiscounted Outturn Scheme Costs by Cost Element

2.4.1 Maintenance Costs

Details of the likely maintenance costs with and without the scheme in place are provided within the Financial Dimension.

The capital cost of maintenance is the cost of people, machinery and materials to maintain the new highway network.

With the scheme in place, the Bypass will require additional maintenance that would not occur if the scheme was not built.

Typical road maintenance profiles with the scheme in place were used. The cost of these maintenance activities was then derived based on Part 2, Chapter 4 of the QUADRO manual.

2.4.2 Present Value of Costs (PVC)

The costs used in scheme appraisal differ from the outturn costs used for funding decisions, as reported in the Financial Dimension. Costs for scheme appraisal are adjusted to the DfT standard present value year (2010) to allow direct comparison with the monetised benefits and are in calendar years.

The outturn scheme costs were entered into TUBA to be estimated over the 60-year appraisal period, converted to 2010 prices, discounted to 2010, and converted to the market price unit of account. A summary of the Present Value of Costs (PVC) output by TUBA is provided in Table 2-3.

Category	Discounted Costs (£m)
Operating and Maintenance Costs	0.62
Investment Costs (including capital costs of Maintenance)	49.85
Developer Contributions	-11.34
Total PVC	**39.13**

Table 2-3 Present Value Costs

2.5 Assessment of Monetised Benefits

2.5.1 Introduction

As shown in Figure 2.1 several elements of a scheme's overall benefits can be monetised. This section of the report describes and summarises each element of the monetised benefits which inform the Benefit to Cost Ratio. Further details of the monetised economic assessment are provided in the scheme's Economic Assessment Report.

2.5.2 TEE Benefits as a Result of the Scheme

The Transport Economic Efficiency (TEE) benefits consist of four key components, set out below and as summarised in Figure 3.1:

- Travel time savings and Vehicle Operating Costs (VOC) benefits as a result of the scheme;
- Impacts on private sector providers and other business impacts;
- Travel time and Vehicle Operating Costs (VOC) dis-benefits as a result of construction activities and
- Travel time and Vehicle Operating Costs (VOC) benefits as a result of maintenance activities.

TEE Travel time savings and VOC benefits as a result of the scheme are calculated with the use of TUBA software and normally constitute the largest proportion of the scheme benefits.

TUBA takes trip, time and distance matrices from the traffic forecast model for each future year, vehicle type and journey purpose (i.e., each User Class) and each time period and calculates travel time saving benefits. It does this by comparing the travel times in the Do-Minimum (without the MEB scheme) scenario with those in the Do- Something (with MEB scheme) scenario. It then applies monetary values (known as Values of Time) to derive the monetary benefits of those time savings over the standard 60-year appraisal period.

TUBA also calculates Vehicle Operating Cost (VOC) changes which occur over the standard 60-year appraisal period due to changes in costs associated with such items as fuel, maintenance, and wear and tear. These occur due to changes in speed and distance when the scheme is implemented and can include both positive and negative values depending upon the scheme's impact upon traffic flows and routing.

The diagram in Figure 2.2 below shows the process for the derivation of the TUBA benefits.

Full details of TUBA assessment undertaken for the MEB scheme can be found in the Economic Assessment Report.

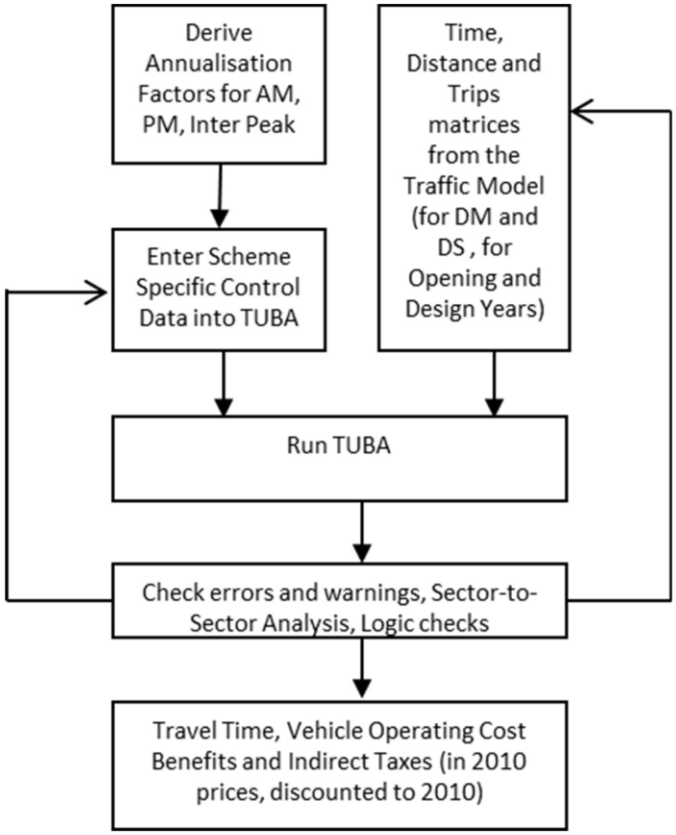

Figure 2.2 TUBA Assessment

The results of the TUBA assessment show that the MEB will deliver significant benefits from journey time savings, amounting to £46.66m over the 60-year appraisal period.

Assessment of the TUBA benefits show that, 59% of the benefits are associated with Business trips,18% from Commuting and 23% from other.

2.5.3 Changes in Indirect Tax

Indirect taxes relate to the taxation levied on goods and services and therefore include excises, duties and VAT. TUBA calculates the changes in Indirect Taxes as a result of changes in speed and distance. These changes affect the amount of fuel being used and therefore affect the amount of taxes the Government receives.

According to TAG guidance, changes in indirect tax revenues are included as part of the Present Value of Benefits (PVB). The change in Indirect Taxes (as a monetary value in 2010 prices discounted to 2010) is therefore included within the AMCB and PA tables and forms part of the BCR.

The results output from TUBA for the entire study area predict a decrease in indirect tax revenues of £0.8m. This is added to the benefits, as shown in the AMCB Table.

2.5.4 Accident Benefits

The MEB scheme is expected to transfer traffic from local roads through Middlewich to a modern high quality single carriageway road, thus providing significant accident savings.

In accordance with TAG, the DfT's COBA-LT software was used to derive accident benefits of the scheme. COBA-LT compares the predicted numbers of accidents with and without the scheme and converts them into monetary values by multiplying the numbers of accidents in each scenario by their monetised costs.

The diagram in **Figure 2.3** shows schematically the methodology for COBA-LT assessment.

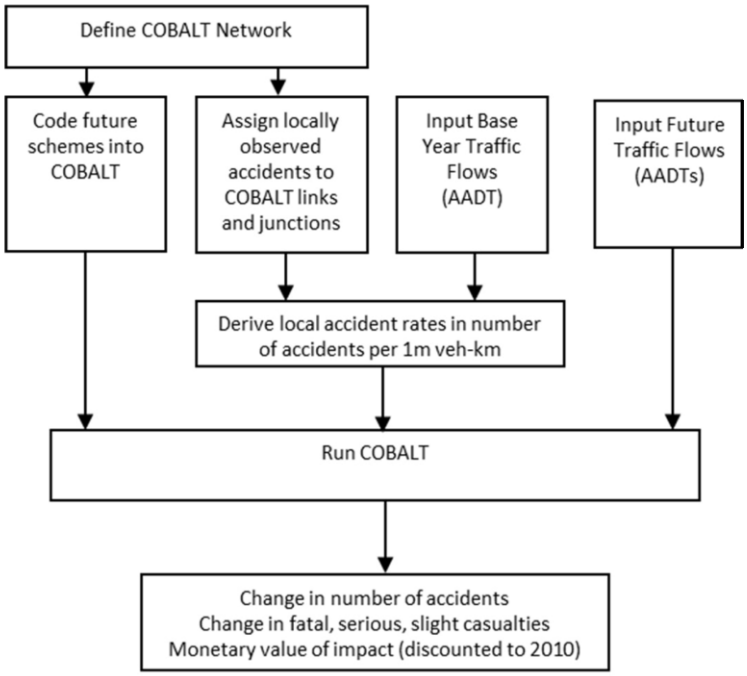

Figure 2.3 COBA-LT Assessment Methodology

With the scheme in place, less traffic travels through Middlewich as the proposed Bypass (new road designed to modern standards) is being used as an alternative and this should result in a reduction in accidents and therefore an accident benefit. However, the introduction of the scheme results in an increase in traffic on other roads, which can increase and decrease flows on existing roads away from the scheme, which could in turn result in an increased or decreased number of accidents away from the scheme. In summary, there is therefore a mixture of increases and decreases in accidents.

The accident results for the wider study area show that there would be an overall decrease in accidents. Table 2-4 below shows the decrease in the predicted number of accidents and casualties over the 60-year appraisal period for the wider study area. The monetary value of this overall benefit would be £x.xm (PVB, 2010 prices, discounted to 2010).

Total Casualties Saved by Scheme	
Fatal	2
Serious	17
Slight	149

Table 2-4 Summary of Accident Benefits

Overall, the safety case for the scheme is positive and many links on the existing network are assessed to experience a decrease in accidents as a result of the scheme.

To some degree there will always be a need to trade off enhanced connectivity to the Major Routes Network with the safety risks of making these connections. It is the interactions between these new links and roads of different characteristics, compared to the base case, that is expressed by the COBA-LT software in its assessment of safety benefits. Based on probabilities and accident rates, where high speed / high volume roads interact there will be an enhanced risk of more serious / even fatal accidents.

However, COBA-LT takes only limited account of the detailed design and safety characteristics of the proposed MEB. It is reasonable to expect that an awareness of this enhanced safety concern will be considered further during detailed design and safety audits.

2.5.5 Journey Time Reliability

The term reliability is referred as a variation in journey times that individuals are unable to predict. Such variation could come from congestion or from non-recurring events, such as accidents. It excludes predictable variation relating to varying levels of demand by time of day, day of week, and seasonal effects which travellers are assumed to be aware of.

TAG provides guidance for modelling and monetisation of changes in journey time reliability which has been followed for the assessment of the scheme.

2.5.6 Environmental – Greenhouse Gases (Assessment in progress at time of writing for this Draft of the FBC)

Changes in traffic flows caused by the introduction of the scheme will result in changes in greenhouse gas emissions from vehicles due to changes in flows, speeds and distance travelled.

The standard Greenhouse Gases Spreadsheet from TAG Unit A3 has been used to calculate the changes in carbon dioxide emissions (tonnes) caused by the scheme, over the duration of the appraisal period.

The results show that the monetary value of the change in carbon dioxide emissions over the 60-year appraisal period is a dis-benefit of £-x.xm (PVB, 2010 prices, discounted to 2010).

2.5.7 Environmental – Noise (Assessment in progress at time of writing for this Draft of the FBC)

Changes in traffic flows can also result in changes in noise, depending on whether properties are located adjacent to affected roads or not. The standard Noise Worksheet from TAG Unit A3 has been used to calculate the change in noise levels during the life of the scheme, the change in number of people 'annoyed' and the monetary value of those changes (PVB).

The results output from the Noise assessment show that there is predicted to be a dis-benefit from increased noise levels, equating to £-x.xm over the 60-year appraisal period.

2.5.8 Environmental – Air Quality (Assessment in progress at time of writing Assessed for this Draft of the FBC)

The likely effects on air quality once the scheme is in place relate predominantly to the changes in traffic emissions for vehicles travelling along affected roads in the study area. The standard Air Quality Worksheet from TAG Unit A3 has been used to calculate the impact of the scheme on local air quality, regional air quality and the economic valuation of air pollution over the 60-year appraisal period.

In terms of local air quality there will be an increase in PM_{10} and NO_2 concentrations as a result of the scheme resulting in a monetary dis-benefit of £-x.xm.

2.6 Assessment of Non-Monetised Benefits

2.6.1 Overview

This section summarises the non-monetised impacts of the scheme on the environment, as well as the social impacts. The non-monetised environmental impacts include Landscape, Townscape, Historic Environment, Biodiversity and Water Environment.

The social impacts include Physical Activity, Journey Quality, Security, Access to Services, Affordability and Severance. The impacts described in this section are not typically monetised and have therefore been assessed using quantitative and qualitative information and they form part of the scheme's AST.

2.6.2 Economy - Regeneration

An initial assessment identified under-performing geographic areas with a priority for regeneration, termed Regeneration Areas (RAs). It concluded that the transport problems and issues experienced in Middlewich are not a major barrier to unemployed RA residents gaining employment.

The principal reason for this is the large distance between the identified RAs and the scheme. The scheme is therefore unlikely to result in increased employment for RA residents or increased levels of business within RAs. In this narrow context, regeneration can therefore be regarded as a neutral impact. However, this assessment of regeneration has a specific and narrow focus.

The conclusion of a neutral impact does not consider the significant economic benefits of the scheme identified elsewhere in the assessment, or the scheme's effect on other regeneration objectives such as the quality of the built environment.

2.6.3 Environmental – Landscape

The impact assessment on landscape was undertaken using the standard Landscape Worksheet from TAG Unit A3. The outcome of the assessment was that the scheme would adversely affect the landscape and result in a loss of vegetation, including Ancient Woodland and Important Hedgerows, topographical changes, a reduction in tranquillity and visual amenity, and the interruption of field pattern and hedgerow boundaries.

2.6.4 Environmental – Townscape

Townscape covers the physical and social characteristics of the built and non-built urban environment and the way in which people perceive those characteristics. The methodology used for appraising the impact of the scheme on townscape is based on a qualitative approach and uses the standard Townscape Worksheet from TAG Unit A3.

The results of the Townscape impact appraisal show that the proposed scheme would not directly impact on the existing townscape elements and features, but there would be a slight adverse effect from a reduction in tranquillity and visual interaction with the proposed scheme in the adjacent open landscape to the west.

2.6.5 Environmental – Historic Environment

The Historic Environment comprises buildings and sites of architectural and historic significance. The impact of the scheme on historic environment has been appraised qualitatively using the standard TAG Worksheet.

The requirement for the preservation in situ of a Scheduled Monument would result in a Slight Adverse impact on its setting.

There would be physical impacts on four undesignated archaeological sites, one undesignated historic building, and five undesignated Historic Landscape Types. The remaining impacts are on setting, including four Grade II Listed Buildings, and nine undesignated historic buildings.

Predicted impacts are of major to negligible magnitude. The potential for the presence of unknown archaeological remains is considered to be medium. Measures to mitigate the impact on the Scheduled Monument by preservation in situ have been agreed in principle with Historic England.

2.6.6 Environmental – Biodiversity

The assessment results show that following the implementation of the mitigation measures that are outlined in the ES to be included in the CEMP, it has been determined that there will be no adverse effects arising from the scheme, with slight beneficial effects expected due to the provision of new habitats and enhancement of existing notable and protected habitats. This is true for species-rich broadleaved woodland, species-rich hedgerows, species-rich hedgerows with trees, semi-improved neutral grassland, ponds and marshy grassland. Despite the length of time required for broadleaved woodland and scattered trees to become ecological established within the landscape, the replacement ratio was deemed substantial to nullify the adverse effects in the short- term.

The species-specific mitigation measures (e.g. mammal tunnels, bat hop-overs and exclusion fencing) incorporated into the construction design, are deemed adequate to safeguard the favourable conservation status of notable and protected species within 500 m of the Scheme.

2.6.7 Environmental – Water Environment

The Water Environment Appraisal Worksheet has been completed to assess the potential impact of the scheme for different water environment features. The results show that impacts of the Middlewich Bypass and Junction Improvements are predicted to have a neutral impact on the water environment in the longer term assuming the adoption of appropriate mitigation measures and adherence to regulations and guidance.

2.6.8 Social – Physical Activity

TAG states that research shows a correlation between physical inactivity and the risk of all-cause mortality. A qualitative and quantitative assessment has been undertaken for the MEB scheme in line with the TAG guidance (Unit A4.1), which is summarised in the Physical Activity assessment worksheet (Appendix ABC).

The assessment concluded that overall NMUs would experience a slight beneficial impact with regard to Physical Activity as a result of the scheme due to the new facilities provided and slightly increased journey times for users of some of the Public Rights of Way (PRoW).

2.6.9 Social – Journey Quality

Journey Quality depends on a number of factors all of which have been qualitatively assessed in line with TAG, with and without the scheme, to make a judgement on the impact of the scheme on journey quality. These factors include traveller care, traveller views, traveller stress as well as additional sub-factors.

It is concluded that overall, there will be an improvement in journey quality for vehicle users and NMUs due to improved connectivity, improvement in NMU facilities as well as traveller care. There will also be a reduction in traveller frustration due to a decrease in traveller stress, route uncertainty and fear of accidents. The scheme would have a neutral effect on travellers' views.

2.6.10 Social – Security

The scheme is not expected to have a significant impact on security. Overall, the assessment concluded that the scheme is considered to have a Neutral impact on Security.

2.6.11 Social – Access to Services

The scheme will not impact the provision of public transport services. The scheme may improve punctuality on bus routes within the Middlewich area, however this impact is unlikely to have a significant impact on accessibility. The scheme does not necessitate the relocation of any essential health or education services. Overall, the assessment concluded that the scheme is considered to have Neutral impact on Access to Services.

2.6.12 Social – Affordability

The scheme does not propose any changes to any form of Public Transport and its associated fare structures. However, the proposed scheme is expected to result in an increase in Vehicle Operating Costs. Overall, the impact is not considered significant. Overall, the assessment concluded that the scheme is considered to have Neutral impact on Affordability.

2.6.13 Social – Severance

Severance is defined within TAG as the separation of residents from community facilities and services caused by substantial changes in transport infrastructure or by changes in traffic flows. To understand the impact of the scheme on severance, the difference in the levels of severance in the with-scheme and without-scheme cases have been examined quantitatively and qualitatively.

Overall, the scheme is considered to have a beneficial effect on community severance between Middlewich and the surrounding communities. The alternative provisions along the proposed scheme would provide increased access for NMUs and thus all people wishing to make pedestrian or cyclist's movements will be able to do so.

2.7 Distributional Impact Assessment

The Distributional Impact (DI) assessment is designed to help understand the impacts of transport interventions on different groups of people, including those potentially more vulnerable to the effects of transport. Consideration of the Distributional Impacts of a transport scheme is a mandatory requirement of TAG. As per TAG Unit A4.2, the DI assessment requires the consideration of the following eight DI Indicators:

- Noise
- Air Quality
- Accessibility
- Security
- Severance
- User Benefits
- Affordability
- Accidents

The full appraisal process is based on a three-step approach:

- Step 1 – Screening Process
- Step 2 – Assessment
- Step 3 – Appraisal of Impacts

Step 1 identifies which of the eight DI indicators should proceed to Step 2, by assessing whether their impacts are either significant or concentrated. Step 1 indicated that for the MEB scheme, six of the DI indicators were found to fulfil the criteria to be taken to Step 2 of the assessment. Only Security and Accessibility were discounted during the initial screening process. The Distributional Impacts of Security and Accessibility were excluded for the following reasons:

Security - the scheme does not propose any changes to public transport and thus the scheme's impact on Security is Neutral.

Accessibility - the scheme will not impact the provision of public transport services. The scheme may improve punctuality on bus routes within the area; however, this impact is unlikely to have a significant impact on accessibility. The scheme does not necessitate the relocation of any essential health or education services

For each of the remaining DI indicators, the Step 2 assessment was undertaken. This involved identifying vulnerable social groups within the area affected by the MEB scheme, including the identification of groups of people with different levels of income, based on national Indices of Deprivation at the Lower Super Output Area (LSOA) level.

Using the national deprivation ranking (as a proxy for income), the LSOAs were divided into five quintiles. Income Group 1 represents the 20% most deprived LSOAs, whereas Income Group 5 represents the 20% least deprived LSOAs. The identified social groups and income segregation informed Step 3 (the full appraisal of impact) which assessed the impact of the scheme against the previously identified vulnerable groups.

A summary of the Distributional Impacts for each indicator is provided in Table 2-5 and Table 2-6.

	Distributional impact of income deprivation					Are the impacts distributed evenly?	Key impacts – Qualitative statements
	1 (Most Deprived) (0 – 20%)	2 (20-40%)	3 (40-60%)	4 (60-80%)	5 (Least Deprived) (80-100%)		
User Benefits	✓✓✓	✓✓✓	✓	✓	✓✓	No	The scheme provides user benefits across all income groups
Noise	-	-	×	×	××	No	The scheme provides noise disbenefits to all except the most deprived quintiles. The majority of people receiving a worsening in noise are in the least deprived income quintile.
Air Quality NO_2	✓✓	✓✓	✓	✓	×	No	The scheme provides air quality (NO_2 and PM_{10}) benefits across all except the least deprived income quintile. The least deprived quintile receives a worsening in air quality.
Air Quality PM_{10}	✓✓	✓	✓✓	✓	×	No	
Affordability	✓✓✓	×××	✓	✓	×××	No	The affordability benefits created by the scheme are split between positively affecting income quintiles 1, 3 and 4, and negatively affecting the remaining quintiles. Negative impacts arise due to small increases in fuel consumption and other vehicle operating costs, as people chose to transfer to the longer but quicker Middlewich Eastern Bypass for their journeys.

Table 2-5 DI Appraisal – Income Groups

	AST Entry										
	Social Groups						User Groups				
Impact	Children & Young	Older People	Carers	Women	Disabled	BME	Pedestrians	Cyclists	Motor-cyclists	Young male drivers	Qualitative statement
Noise	✓	-									Three schools would receive a decrease in noise, while one school would receive a minor increase. No impact expected to nursing homes.
Air Quality NO_2	✓✓										Children receive benefits in NO_2 levels at home in line with the overall population. Eleven schools would receive in improvement in NO_2 levels, while two would experience a very slight deterioration.
Air Quality PM_{10}	✗										Children receive disbenefits in PM_{10} levels at home with the overall population.
Accidents	✓	-					✓	✓	✓	✓	Small clusters of children, casualties have been identified on links which are expected to receive some accident benefit.
Severance	✓✓	✓✓			✓✓		✓✓	✓✓			All vulnerable groups are expected to receive similar reductions in severance.

Table 2-6 DI Appraisal – Social Groups

2.8 Assessment of Wider Economic Benefits

2.8.1 Introduction

In line with TAG, the monetised impacts included in the calculation of the scheme BCR do not include the effect of the wider economic impacts of the scheme, as measured by an assessment of the gross value added (GVA) growth unlocked by the scheme.

However, given the nature and objectives of the MEB it was considered important that the economic assessment would to some extent capture the GVA impacts to demonstrate that the strategic objectives will be met.

2.8.2 Gross Value Added (GVA) Benefits

GVA measures the total value of goods and services; i.e., economic activity. In its simplest terms, it is therefore Gross Domestic Product (GDP) at a local/regional level.

Transport acts as an enabler of growth by allowing additional jobs to be accommodated in a certain location thanks to enhanced transport links and transport capacity. This applies especially to areas suffering from congestion and insufficient transport links. These jobs are therefore not created by the transport scheme itself but are supported by the increase in accessibility facilitated by the scheme. The jobs are therefore (to varying proportions) dependent on the transport scheme. This GVA assessment aims to quantify the increase in GVA for the local economy as a result of these additional jobs.

The GVA analysis seeks to complement the standard economic appraisal and provide an indication of the total GVA that could be realised if a transport scheme is implemented.

Unlike standard transport appraisals, there is not a single methodology that has been incrementally improved over the years for estimating the impacts of a scheme on GVA, employment, or similar measures of the performance of the real economy. In contrast, methodologies vary considerably across studies.

For the Middlewich Eastern Bypass scheme, a methodology has been used that is based on empirical evidence, research and a consistent theoretical framework. This methodology has been utilised previously to assess similar transport schemes across the country and is considered suitable for the assessment being undertaken.

Based on the above, there is a forecast increase in GVA to the local economy of £412m over the 60-year period, and which can be directly related to the impacts of the transport scheme. This is a 'net' GVA figure and incorporates the impacts of the potential redistribution of jobs from other areas. This equates to a benefit of around £7m per year in a DfT price base of 2010 (based on the total number of jobs in the future).

2.9 Value for Money Assessment

2.9.1 Appraisal Summary Table (AST)

The AST presents evidence from the assessment that is undertaken to inform the Economic Case of an intervention. Applying the principles of HM Treasury Green Book, the AST has been designed to record all impacts - Economic, Environmental, Social, Public Accounts and Distributional - at the national level.

The AST for the MEB scheme, which summarises the information contained within the Economic Dimension, is included in Appendix ABC.

2.9.2 Value for Money Statement

The Value for Money assessment of the proposed Middlewich Eastern Bypass scheme has been undertaken in line with TAG, in order to support the Business Case of the scheme.

As part of this assessment the economic, environmental, social, distributional and fiscal impacts of the proposed scheme have been appraised using qualitative, quantitative and monetised information.

A summary of the overall monetised costs and benefits as prepared for the economic case is provided in Table 2-7. Full details of the economic assessment results are contained within the Economic Assessment Report.

The Net Present Value (NPV) has been calculated, which shows the extent to which the benefits of the scheme outweigh the costs. In addition, a Benefit to Cost Ratio (BCR) has been calculated. The BCR represents the level of benefits generated by the scheme for every £1 of cost and is simply calculated by dividing the PVB by the PVC.

Type			Cost or Benefits (£m)
Benefits	Business User Benefits	Travel Time	27.64
		Vehicle Operating Costs	0.37
		Net Business User Benefits	**28.01**
	Consumer – Commuting User Benefits	Travel Time	8.46
		Vehicle Operating Costs	-0.28
		Net Consumer – Commuting User Benefits	**8.19**
	Consumer – Other User Benefits	Travel Time	10.55
		Vehicle Operating Costs	-1.16
		Net Consumer – Other User Benefits	9.39
	Delays During Maintenance		3.51
	Delays During Construction		-0.78
	Accident Benefits		2.60
	Indirect Tax Benefits		0.80
	Greenhouse Gas Benefits		-1.70 (2021 Figures)
	Air Quality		-2.00 (2021 Figures)
	Noise		-1.70 (2021 Figures)
	Total PVB		**34.97**
Costs	Operating and Maintenance Costs		0.618
	Investment Costs (including capital costs of Maintenance)		49.85
	Developer Contributions		-11.34
	Total PVC		**39.13**
Net Present Value (NPV)			**-4.16**
Benefit to Cost Ratio			**0.89**
Benefits Level 2	Journey Time Reliability		10.20
	Wider Impacts approximation		0.94
	Total PVB (Reliability + Wider Impacts)		11.14
Total PVB (Level 1 + Level 2)			**46.11**
Net Present Value of Benefit (NPVB)			**6.98**
Benefits to Cost Ratio (BCR)			**1.18**

Table 2-7 Monetised Assessment Summary (2010 prices, discounted to 2010)

Table 2-7 indicates that the PVB of the scheme exceeds the PVC to provide a Net Present Value (NPV) of £6.98. The BCR of the scheme is 1.18.

Based on the DfT guidance on Value for Money categorisation (provided in Table 2-8), based on the BCR alone, the proposed MEB scheme represents Low Value for Money.

Value for Money Category	BCR Range
Poor VfM	Less than 1
Low VfM	Between 1 and 1.5
Medium VfM	Between 1.5 and 2
High VfM	Between 2 and 4
Very High VfM	Greater than 4

Table 2-8 DfT's Value for Money Benefit Cost Ratio Categorisation

The majority of the benefits generated by the scheme are associated with travel time savings for business and non-business road users.

The summary of the monetised costs and benefits information along with the BCR is presented in the standard DfT tables (TEE, PA and AMCB) which are included in Appendix ABC.

2.10 Conclusions

The Economic Case has presented a comprehensive assessment as to the economic impacts of the proposed MEB scheme.

The results of the economic assessment show that the MEB scheme is forecast to generate a BCR of 1.18. The MEB scheme therefore represents Low Value for Money based on DfT guidance.

A Gross Value Added (GVA) assessment has also been undertaken based on the number of jobs likely to be created by the MEB scheme. These developments would provide a net GVA benefit to the local economy of £7m per year. Through supporting the creation of these additional jobs, it is estimated that over the course of the 60-year appraisal period, the MEB scheme could add an additional net £412m to the local economy.

As GVA analysis is not a mandatory requirement within TAG transport scheme appraisal, the GVA benefits have not been included in the calculation of the BCR and Value for Money of the scheme. However, they do support the strategic and economic case for the scheme.

3. Financial Dimension

The Financial Dimension concentrates on the affordability of the proposal, its funding arrangements and technical accounting issues (value for money is scrutinised in the Economic Dimension). The Financial Dimension is discussed under the following headings:

- Methodology
- Assumptions
- Base Costs
- Maintenance Costs
- Risk
- Optimism Bias
- Scheme Costs Adjusted for Risk and Optimism Bias
- Preferred Funding Arrangements
- Alternative Funding Arrangements
- Conclusion

3.1.1 The scheme cost estimate has been derived for the Scheme.

The cost estimate is based on the following:

- A market tested price build up from the appointed contractor based upon the completed design
- Statutory Undertaker costs from the latest C3 or C4 estimates;
- Land costs
- Supervision and Preparation costs
- Risk.
- Inflation

3.1.2 Assumptions

CEC will be responsible for paying any Part 1 Claim compensation costs made as a result of the scheme. The compensation costs (Part 1 Claims) can only be claimed from one year after the opening of the road to traffic and claims have to be made within the 6 years following the first claim day.

3.1.3 Base Costs

The base costs, which do not include risk, inflation or optimism bias are shown in Table 3-1. The base costs are split into the following categories:

- Construction
- Land
- Supervision Costs
- Preparation Costs

Investment Cost Component	Base Cost £m
Construction and Preliminaries	£49.3m
Land and Property (Inc. Part 1 Claims)	£19.2m
Preparation Costs	£15.1m
Supervision Costs	£3.5m
Base Cost Sub Total	**£87.0m**

Table 3-1 Base Costs – Outturn

3.1.4 Adjusting for Risk

A post tender Quantitative Risk Assessment was carried and a project risk allowance of £5.3m was subsequently allocated. This would be used to cover items such as (but not limited to) commercial claims, legal issues, and elements which the shortlisted contractors were asked to exclude at tender stage.

The project risk allowance is approximately 6% of the tendered construction cost which is comparable to recently constructed highway schemes.

Table 3-2 shows the £5.3m risk contribution and how it should be added to the base cost to produce a risk-adjusted cost estimate of £92.3m.

Investment Cost Component	Cost excluding real cost increases £m
Construction and Preliminaries	£49.3m
Land and property (Inc. Part 1 claims)	£19.2m
Preparation costs	£15.1m
Supervision costs	£3.5m
Sub Total	**£87.0**
Risk Contribution	£5.3m
Risk Adjusted cost using QRA	**£92.3m**

Table 3-2 Risk Adjusted Base Cost Outturn

3.1.5 Maintenance Costs

Table 3-3 shows costs of maintaining Middlewich Eastern Bypass once constructed. These costs have been calculated based on guidance in the QUADRO manual (DMRB Volume14 Sec 1 Part 2 Chapter 4).

Category	Estimate (60 Years)
Maintenance (Capital Costs)	£3.5m

Table 3-3 Scheme capital maintenance costs

3.2 Overall Affordability and Funding

3.2.1 Fundraising Arrangements

The funding breakdown for this scheme is shown in Table 3-4.

Funding Source	% of Total	Amount
DfT	50.2%	**£48.0m ***
Local - CEC	26%	**£24.9m**
Local - Developer	23.8%	**£22.8m**
Total	100%	**£95.7m**

Table 3-4 Funding breakdown by source

* includes £1.2m initial award for development of OBC.

3.2.2 Funding Approval

Approval was sought from Cheshire East Council's Committee for the funding arrangement outlined above. Committee subsequently approved the recommendations.

A copy of the minutes from the Committee meeting will be made available upon request.

CEC's Section 151 Officer has provided a signed declaration outlining CEC's financial commitment to the scheme, in line with the funding arrangements described above. A copy of the Section 151 Officer letter is provided in Appendix ABC.

3.2.3 Alternative Funding Arrangements

There are no other identified funding strategy options at this stage.

3.2.4 Conclusion

The outturn scheme cost is estimated to be £92.3m plus £3.5m maintenance costs, including risk adjustments and Part 1 Claims, but excluding optimism bias.

The scheme will be funded through a combination of DfT and contribution from Cheshire East Council. Cheshire East Council has approved the underwriting of any necessary gap funding required to deliver the relief road.

4. Commercial and Management Dimension

The Commercial Dimension provides evidence on the commercial viability of a proposal and the procurement strategy that will be used to engage the market. It presents evidence on risk allocation and transfer, contract timescales and implementation timescales as well as details of who will be responsible for managing the contract.

The Commercial Dimension is discussed under the following headings:

- Procurement Workshops
- Procurement Options
- Securing the Services of a Contractor
- Committee Approval of chosen Procurement Strategy
- Payment Mechanisms
- Contract Length
- Contract Management
- Risk Allocation and Transfer
- Procurement Programme
- Conclusion

4.1 Procurement Strategy and Route

4.1.1 Procurement Workshops

4.1.1.1 April 2018 Workshop

To assist with determining an optimum 'Procurement Method' a Procurement Workshop was held in April 2018 between key Officers of the Council, the Jacobs designers and Jacobs contracts and commercial specialists. The workshop was attended by the following individuals:

- Chris Hindle (Cheshire East – SRO)
- Richard Hibbert (Cheshire East – MEB Project Sponsor)
- Robert Grew (Cheshire East – MEB Assistant Project Sponsor)
- Paul Griffiths (Cheshire East – Infrastructure Delivery Manager)
- Kate Beirne (Cheshire East – A500 Project Sponsor)
- Steve Mellor (Cheshire East - Procurement)
- Niamh Whalley (Cheshire East - Legal)
- Paul Holder (Jacobs – MEB Project Manager)
- Dan Teasdale (Jacobs – A500 Project Manager)
- Colin McHugh (Jacobs – Procurement)
- Martin Davis (Jacobs – Middlewich Eastern Bypass Technical Assurance)
- Nigel Downes (Network Rail – Asset Protection)

The workshop was convened to examine the potential procurement options for the scheme.
The aims and the objectives of the workshop were as follows:

- Assess the pros and cons, opportunities and risks associated with each of the potential procurement options.
- Analyse the programmes associated with each of the procurement options and whether they can be achieved given the milestone dates on each of the projects.
- Assess the ways in which the services of a contractor could be secured – i.e., via a framework or the open market.

The outcome of this Procurement Workshop can be found in the Procurement Options Report. This report is included in Appendix ABC.

4.1.2 Procurement Options

The workshop focussed on the following three procurement options, as reported in the workshop report.

- Design and Build (D&B), both during statutory process or after Secretary of State decision.
- Early Contractor Involvement (ECI)
- Construction Only Contract – i.e., NEC3 Engineering and Construction Contract

An ECI procurement method was selected for the delivery of the scheme, with a full consultant design and the contractor providing constructability input, and budget and programme management. It also recommended that Cheshire East Council seek Committee and Legal approval to commence procurement during the statutory process.

The form of contract will be NEC3 Option C - target cost with bill of quantities.

The workshop also focussed on the following three options for securing the services of a Contractor, as reported in the workshop report.

- OJEU Notice – Restricted Procedure
- OJEU Notice – Open Procedure
- Framework (Highway England's Collaborative Delivery Framework (CDF) or the Midlands Alliance Framework)

A presentation was given to Cheshire East Council on 16th May 2016 by Scape Procure and Balfour Beatty on the use of the Scape Framework. Scape Group is a public sector owned built environment specialist. The Scape Civil Engineering & Infrastructure Framework is a national framework delivered by Balfour Beatty. It has a four-year duration and an overall value of £1.5 Billion and is available to all public bodies in the UK. The nominal project value for contracts is between £1m and £40m; however, Scape is not capped at that value and has been used on contracts up to £79m. The framework uses NEC options and is OJEU compliant.

The framework allows a project to be developed from inception to post completion with Balfour Beatty being involved in the early stages of projects. It offers a quick way to market with individual packages of work being market tested and managed using an open book approach. The framework also includes cost planning and risk management. Scape is a collaborative arrangement, and the core management team is selected from all parties in the contract. The success of the contract would depend on CEC putting in place the right controls at the outset of the contract, including influencing the quality of the management team, and then exercising these controls.

There is a management fee for using the framework.

The Scape framework was selected for use with MEB on the basis of successful use on a previously completed CEC project at Crewe Green Roundabout and Balfour Beatty were engaged on a 2-stage contract with stage 1 covering pre-construction services, and with no contractual commitment for stage 2 (the construction stage).

Procurement Programme

Table 4-1 provides a summary of the key dates in the current procurement programme for the scheme, as reported to Cheshire East Committee. This programme assumes the use of a NEC3 Option C Priced Contract.

Procurement milestone	Date
Scape Feasibility Stage	October – November 2018
Evaluation of Scape Proposal	December 2018
CEC Committee approval of contract award	January 2019
Contract award Stage 1 works (pre-construction)	January 2019
Contract award Stage 2 works (main construction)	February 2024

Table 4-1 Procurement Programme

4.2 Risk Allocation

Use of a two stage ECI NEC3 Option C Target Cost Contract with Client Design (traditional contract), will provide Cheshire East Council with early budget and programme certainty and optimum risk transfer to the contractor, whilst providing incentivisation for cost improvements throughout the project delivery.

Throughout the project development stage risks have been reviewed and managed continuously through the use of a Quantified Risk Assessment managed by the contractor in collaboration with the design team and the Council.

Allocation of construction (Contractor) risks and Client risks has been undertaken.

4.3 Charging Mechanism

The payment mechanisms between Cheshire East Council and the appointed contractor is set out in the construction contract, which will identify the work to be undertaken in a priced activity schedule. On-site inspections and regular reviews will be carried out; payment will only be made against completed activities (i.e. only work undertaken will be paid for).

4.4 Key Contractual Arrangements

Payment Mechanisms

Payments will be on a monthly basis against an agreed measure of works undertaken plus any goods or materials vested in the Employer.

Contract Management

Timescales for implementation will be as per the programme contained within the management case.

The contract management arrangements during the implementation stage will be administered by a CEC Project Manager and Supervisor. The CEC Project Manager and Supervisor will also provide a site presence

to deal with all contract variations/issues and early warnings/compensation events. The roles for the project will otherwise be as set out in the detail within the Project Governance section of the Management Case.

This approach will also ensure that the construction contract is programmed and coordinated. In this way, Cheshire East Council will seek to ensure certainty of programme and high value for this project whilst minimising wider impacts on local highway users, residents, and business.

If there is a prediction that any one tolerance is to be exceeded; this will be raised as an issue to the Project Board for agreement.

Contract Length

The construction contract will cover the duration of the main construction works as well as a design period and advanced environmental works (prior to the main construction works). A detailed construction programme has been produced and will be finalised on approval of the FBC when certainty of funding enables the Council to issue a Notice to Proceed to Stage 2 (main construction).

The main construction works will have a 3 year duration with the bypass open to traffic 6 months ahead of full completion.

Contract Management

Timescales for implementation will be as per the programme contained within the management case.

The contract management arrangements during the implementation stage will be administered by an CEC Project Manager and Supervisor. The CEC Project Manager and Supervisor will also provide a site presence to deal with all contract variations/issues and early warnings/compensation events. The roles for the project will otherwise be as set out in the detail within the Project Governance section of the Management Case.

This approach will also ensure that the construction contract is programmed and coordinated. In this way, Cheshire East Council will seek to ensure certainty of programme and high value for this project whilst minimising wider impacts on local highway users, residents, and business.

The contract will establish an approval process that will be put in place via the Project Board. Project tolerances will be approved by the Project Executive. If these tolerances are exceeded, an exception report will be raised by the Project Manager.

If there is a prediction that any one tolerance is to be exceeded; this will be raised as an issue to the Project Board for agreement.

4.5 Personnel Implications

As outlined above, procurement options for the project were investigated in 2018 and the recommended option of a contract based on NEC3 Option C - target cost with activity schedule, was subsequently approved by the Council.

Contract documentation was prepared by Jacobs along with members of CEC's procurement team and CEC Legal Services.

5. Programme/Project Management Dimension

5.1 Project Management Governance Arrangements

The Programme/Project Management Dimension describes how the scheme will be managed and delivered. In accordance with the Department for Transport (DfT) requirements it presents details of the project planning, governance structure, risk management, communications and stakeholder management, benefits realisation, and assurance.

The Programme/Project Management Dimension sets out a plan to ensure that the benefits set out in the Economic Case are realised and will include measures to assess and evaluate this. The Management Case for the Middlewich Eastern Bypass scheme is discussed under the following headings:

- Governance
- Assurance
- Delivery Programme
- Risk Management
- Communications and Stakeholder Management
- Conclusion

5.1.1 Governance

The outline of the governance structure for the project management and delivery of the scheme is presented below and an organogram can be seen in Figure 6.1 below.

Figure 6.1– Outline of Governance Structure (TBC)

5.1.2 Programme Board

The Project Board meets monthly. The Project Board is chaired by the SRO (Chris Hindle), who takes executive responsibility for decisions relating to the project. Other members of the Project Board are shown in Table 6.1 below:

Name	Role
Chris Hindle	SRO
Neil Grundy	Project Sponsor
John Farrell	Jacobs Senior Supplier
Nick Fox	Balfour Betty Senior Supplier

Table 6.5-1 Project Board Members

Key responsibilities of the Project Board include:

- Overseeing the development and implementation of the project Implementation Programme.
- Reviewing tender documentation as developed for the project and to monitor key policy or other issues requiring the attention of the Executive Officers of Cheshire East Council.
- Ensuring the required resources are identified and deployed on a timely basis across the Project.
- Ensuring the relevant Funding & Risk, Procurement and Consultation strategies are developed in a timely basis and implemented across the Project.
- Ensuring the project Implementation schedule is developed and regularly reviewed and updated to monitor actual progress against planned activity.
- Ensuring risks are identified and captured in the project Risk Register and mitigated against.
- Ensuring that key issues are identified, captured in the project Issue Log, managed and escalated when required.
- Ensuring that costs are identified and managed within agreed budgets.
- Ensuring that the required environmental, health and safety procedures are implemented and subsequently complied with across the project.
- Advising the Cabinet of project progress including key issues and options for decision making.
- As the Project Board members do not work full time on the project, they place a great deal of reliance on the Project Manager (the role of the Project Manager is outlined later within this

section). Although they receive regular reports from the Project Manager, there are key issues for consideration:

- Are things really going as well as we are being told?
- Are any problems being hidden from us?
- Is the solution going to be what we want?
- Are we suddenly going to find that the project is over budget or late?

All of these points agree that there is a need in the project organisation for independent monitoring of all aspects of the project's performance and products.

5.1.3 Project delivery team

The Project Delivery Team consists of several specialist skilled staff from the consultancy acting on behalf of Cheshire East Council to develop the scheme. The role of the Project Delivery Team is to deliver the scheme in line with instructions provided by the Project Manager.

The Project Delivery Team is shown in Table 5-2.Table 5-2 Delivery team

Name	Role	Organisation
Paul Holder	Project Manager	Jacobs
Emma Agar	Project Controller	
Martin Davies	Project Principal & Technical Review	
Simon Bird	Environmental Co-ordinator	
Kostas Kranas	Highways Team Leader	
Richard McGarr	Traffic and Transportation Team Leader	
Ashley Stratford	Planning	
Stewart Knowles	Operational Safety	
Mark Hinton	Structures Team Leader	
Jonathan Cahm	Geotechnical Team Leader	
Charlie Bowen	Consultation Lead	

Table 5-2 Delivery team

The Project Delivery Team are supported by specialist external sub-suppliers where appropriate.

5.2 Project Assurance Arrangements

5.2.1 Gateway Reviewers

A Gateway Review is an assessment of a project or programme carried out at crucial junctures in its development, to provide assurance to the Senior Responsible Owner that it can progress successfully to the next stage. Its focus is on whether the appropriate framework, processes and resources are in place. It does not duplicate the appraisal of the Value for Money case for a scheme.

The Gateway process was developed by the Office for Government Commerce (OGC) who has accredited 'Local Partnerships' to conduct Gateway Reviews for Local Authorities.

There are five Gateway Reviews during the lifecycle of a project, three before contract award, one post contract award looking at service implementation and a final review seeking confirmation of the operational benefits. The five Gateway Reviews are listed below.

- Gateway Review 1 – Business Justification
- Gateway Review 2 – Procurement Strategy
- Gateway Review 3 – Investment Decision
- Gateway Review 4 – Readiness for Service
- Gateway Review 5 – Benefits Evaluation

The Gateway stages are broadly linked to the DfT's approval stages, but the precise timing may vary from scheme to scheme. Normally Gateway 1 and 2 reviews would be carried out between Programme Entry and Conditional Approval, with Gateway 3 being carried out prior to Full Approval.

As the scheme costs are in excess of £20m, MEB intends to accord with best practice and progress the scheme through all stages of the Gateway Review process. This will ensure that the delivery of the scheme is challenged by independent review. As part of its ongoing commitment to the progression of the scheme MEB has already commenced the Gateway Review process.

Cheshire East Council's Finance and Contract Procedure Rules set out the arrangements for managing the Council`s financial and contractual arrangements. The Finance, Contract and Procedure Rules also deal specifically with risk management, control of resources and establish key principles for decision making practice.

The Council is effectively operating "Project Gateway" which is a robust discipline to manage Major Projects and Programmes across the authority. The key aspect of effectively operating the Project Gateway is a high-level, Member led Governance Group called the Executive Monitoring Board (EMB). One of the key aims of the EMB is to provide consistent and robust direction for all Major Projects and Programmes that rest within the Capital Programme.

The EMB rejects scheme business case proposals if they are unconvinced of the viability of the Business Case and any other aspect of the of the delivery plan or of fit with corporate priorities and also identifies improvements in the process as part of the annual lessons learnt exercise.

The monitoring is mainly focused on performance, progress against plan, risks and issues, quality, benefits and Value for Money.

The EMB also ensures that major projects and programmes are on track to deliver what they set out to do in their Business Case and Planning proposals and confirm there is a continued Business Case viability.

Gateway 2 / 3 Hybrid Assurance (Undertaken in June 2021)

In June 2021 the scheme was subject to a hybrid Gateway Review 2 (Procurement Strategy) and Gateway 3 (Investment Decision) review in anticipation of an earlier submission of the FBC than has transpired.

Gateway 3 Assurance (Undertaken in July 2023)

In July 2023 the scheme was subject to a Gateway Review 3 (Investment Decision). The final report is awaited at the time of FBC production, but the draft report is included as Appendix XX. The key findings of the review were as follows

The Review Team finds that there is strong support and a robust case has been made for the new Bypass that has the ability to unlock new homes.

The Review team finds that there is strong support for project from Council Members and senior stakeholders. The project aligns well with regional strategic priorities as well as the Council's regional strategic priorities. Excellent progress has been made. However, several important issues and tasks need to be completed.

We found there has been good communications with the local community and senior stakeholders evidenced by the approach to public consultation and the fact that there is strong political and senior stakeholder support for the project.

We have given this project an Amber DCA as successful delivery appears feasible but significant issues already exist requiring management attention. Management is well aware of the issues and they should be resolvable.

5.3 Project Plan (Schedule)

The delivery programme for the scheme is owned by the Project Manager and updated by the Project Planner. The programme is reviewed and updated as necessary prior to formal monthly progress meetings. Changes to the project programme that could impact upon key milestones within the development and delivery of the Middlewich Eastern Bypass scheme are communicated to the Project Board.

The key project milestones for the Middlewich Eastern Bypass scheme are shown in Table 6.3.

Key Milestone	Date
Confirmation of approval	December 2023
Stage 2 contract awarded	February 2024
Completion of CPO implementation	April 2024
Start of major construction works	April 2024
Bypass Open	September 2026
Full scheme completion	March 2027

Table 6.3 Project milestones programme

A scheme delivery programme is included in Appendix ABC. The programme highlights project interdependencies and the key dates associated with the following tasks:

- Statutory Process;
- Business Case;
- Procurement;
- Construction; and
- Completion.

5.4 Stakeholder Engagement and Communications

To ensure that all stakeholders affected by the scheme are kept informed throughout the development and construction of the scheme, an extensive stakeholder mapping exercise has been completed.

A Stakeholder Engagement Plan has subsequently been developed which details all of the stakeholders (both statutory and non-statutory) that either have already been or will be engaged with during the development of the scheme. It also provides a summary of the purpose of the consultation as well as providing a summary of the engagement to date and the proposed future engagement.

The main stakeholder groups with an interest in the Middlewich Eastern Bypass are identified as:

- Cheshire East Council – CEC are overseeing and are responsible for promoting this scheme.
- Cheshire West & Chester Council – owing to the locality of Middlewich the project board includes a representative of neighbouring Cheshire West Council. The 2 unitary councils routinely cooperate on transport planning for the mid Cheshire towns to ensure an integrated approach.
- Cheshire and Warrington Local Enterprise Partnership – responsible for the Strategic Economic Plan ambitions for growth in the sub-region and determine local economic priorities. The LEP is also responsible for programme management of the Local Growth Fund projects in Cheshire and Warrington.
- Middlewich Town Council – is an active forum seeking to improve the vitality of the town for residents and visitors. The town council has supported development of the bypass proposals and engaged throughout with public engagement events.
- Local community groups – The first key phase of public consultation took place in August-September 2016, where residents were informed about the scheme, in the context of wider transport challenges facing Middlewich. The Middlewich Transport Consultation enabled residents and the local community to provide feedback on priorities and potential solutions.
- Local employers – The bypass will benefit employers, through enhanced opportunity from relived congestion. Employers will be invited to get involved in consultation.
- Local developers – The scheme will be of interest to developers of other projects, as access to the scheme in future may affect other projects. The Council has actively engaged with a number of key development stakeholders who have interests in land affected by the proposed alignment. These developers participate in a regular project Reference Group to ensure they are informed and engaged in development of the project. A number of letters of support have been provided by representatives of Pochin Developments, DB Symmetry, Middlewich Investment Properties and Willsgrove which accompany this business case.
- Councillors – As locally elected representatives, they will be a point of contact for local residents who live near the proposed routes of the bypass. The consultation process commenced in August/September 2016. Borough, town and parish councillors are all actively engaged in the public engagement process.
- Network Rail – have statutory responsibility for the Sandbach to Northwich railway, which is crossed by the proposed scheme. A Basic Asset Protection Agreement (BAPA) is in place with Network Rail, whose designated project manager Andy Hughes is assisting in moving the project through to Approval in Principle stage.
- Canals and Rivers Trust (CRT) – the scheme crosses the Trent & Mersey Canal therefore CRT are engaged in consenting for the new overbridge.
- Environment Agency – statutory responsibility for main river flood management and discharge consents. The project team have engaged EA in consideration of the approach to flood modelling at the earliest stage of preparing the Water Management Strategy to support planning.

5.5 Risk and Issues Management

5.5.1 Risk Register

A detailed Quantified Risk Assessment (QRA) has been undertaken. The QRA is based on industry knowledge and experience from the team's involvement in other schemes of a similar nature.

Each of the risks identified has been allocated a 'risk owner', depending on the risk type and its proximity (i.e., when it is likely to be realised / removed).

Informal risk reviews are undertaken on a monthly basis. Formal risk workshops are held if and when the Project Manager deems them necessary. Risk is an agenda item at both Progress Meetings and Project Board Meetings, both of which are held monthly. At each of these meetings the 'Top 5' risks are discussed and if necessary, the QRA is updated.

The risk register attempts to separate risks out dependent on their nature. Examples of the type of risk include (but are not limited to):

- Infrastructure;
- Political;
- Environmental;
- Process; and
- Stakeholder.

The QRA is based on industry knowledge and experience from other schemes which have been constructed.

5.5.2 Contingency Plan

The following contingency measures are in place on the scheme:

- **Funding** – as stated in the Financial Case, in the event of overspend the liability will fall upon Cheshire East Council to source and secure funding for any overspend.
- **People** – all resources have been identified both pre and post construction. All positions have been filled and in the event that people leave the project team with little or no notice, the contingency plan is to recruit from the Council's own resource availability;
- **Information** – all information is currently held on either the Council's IT servers (backed-up daily) or suppliers' own IT servers (backed-up daily);
- **Skill sharing and knowledge transfer** – the project team has monthly (Project Delivery group) meetings, which are structured to ensure each aspect of the project under development is discussed; and that each work stream report is also discussed.
- **Suppliers (including consultants, delivery partners and contractors)** – the Council has in place robust procurement procedures, which incorporate business continuity requirements, and are designed to maximise the capacity of appointed suppliers to deliver the desired outcomes.
- The project team has established governance and reporting frameworks that are in part designed to provide early warnings of a supplier's inability to continue to undertake its duties. Early warnings will enable the project team to implement contingency plans, which in the event that duties cannot be redistributed within the existing project team and wider supply chain, could ultimately include replacing affected suppliers. If suppliers need to be replaced during the performance of individual contracts, the project team and the Council's legal and procurement teams will work closely together to ensure the time taken to appoint replacement suppliers is minimised.

Appendix A – Uncertainty Log

Uncertainty	Location	Land Use	Number of units/size/jobs	Units (Area/Counts)
Near Certain	East of Abbey Road, Sandbach	Housing	165	Dwellings
Near Certain	CW114JH, Sandbach	Housing	138	Dwellings
Near Certain	1Sandbach	Housing	126	Dwellings
Near Certain	2Sandbach	Housing	154	Dwellings
Near Certain	3Sandbach	Housing	200	Dwellings
Near Certain	1M6 -J17, Sandbach	Housing	237	Dwellings
Near Certain	2M6 -J17, Sandbach	Housing	136	Dwellings
Near Certain	1Middlewich, CW10 0HN	Housing	149	Dwellings
Near Certain	2Middlewich, CW10 0HN	Housing	194	Dwellings
Near Certain	3Middlewich, CW10 0HN	Housing	235	Dwellings
Near Certain	4Middlewich, CW10 0HN	Housing	84	Dwellings
Near Certain	Land rear of 165 to 219 Townsfields Road	Housing	210	Dwellings
Near Certain	Booth Lane, Middlewich, CW10 0RP	Housing	450	Dwellings
Near Certain	Land adjacent Ash Cottage/Yew Mount, Harthill Road, Burwardsley ("Location 1A")	Housing	7	Dwellings
Near Certain	Portico House, High Street,Tattenhall	Housing	6	Dwellings
Near Certain	Low Ridge, Burwardsley Road, Tattenhall	Housing	4	Dwellings
Near Certain	Linacre Bank, Common Lane,Tarporley	Housing	1	Dwellings
Near Certain	Oathills Lea, Oathills Close, Tarporley	Housing	20	Dwellings
Near Certain	Lower Lane Service Station, Lower Lane, Rushton, Tarporley	Housing	2	Dwellings
Near Certain	The Hollies, Darnhall School Lane, Winsford	Housing	30	Dwellings
More Than Likely	The Green, Back Lane, Duddon	Housing	1	Dwellings
Near Certain	12 New Road, Duddon, Chester	Housing	1	Dwellings
Near Certain	Woodford Grange - Former Woodford Lodge High School, Woodford Lane West, Winsford	Housing	54	Dwellings
Near Certain	Land adjacent 16 Northgate, Utkinton, Tarporley	Housing	1	Dwellings
Near Certain	Parkway House, Mill Lane, Little Budworth, Tarporley	Housing	2	Dwellings
Near Certain	Platt's Meadow, Way's Green, Winsford (NP site STC2)	Housing	3	Dwellings

Near Certain	Land adjacent Rowley Farm Quarry Bank Utkinton Tarporley	Housing	1	Dwellings
Near Certain	Land to rear of Woodford Lane, Winsford	Housing	4	Dwellings
Near Certain	Land at Springbank Crescent, Winsford	Housing	16	Dwellings
Near Certain	Former Drill Hall, Dingle Lane, Winsford	Housing	31	Dwellings
Near Certain	376A High Street, Winsford	Housing	4	Dwellings
More Than Likely	Land off Middlewich Road (rear of 107-155), Winsford	Housing	21	Dwellings
More Than Likely	Harlede, Whitby's Lane, Winsford	Housing	2	Dwellings
More Than Likely	Land adjacent 52 High Street, Winsford	Housing	14	Dwellings
Near Certain	Land at Grange Yard, Winsford	Housing	39	Dwellings
Near Certain	2-4 Ribble Place, Winsford	Housing	3	Dwellings
More Than Likely	Liquid Lounge, New Road, Winsford	Housing	12	Dwellings
Near Certain	The Gallop Stables, Racecourse Lane, Cotebrook, Tarporley	Housing	1	Dwellings
More Than Likely	Land adjacent 123 Wharton Road, Winsford	Housing	1	Dwellings
Near Certain	Forest Farm, Heath Lane, Cotebrook, Tarporley	Housing	1	Dwellings
Near Certain	Verdin - Playing fields and land adjacent to Verdin Exchange, Winsford	Housing	268	Dwellings
Near Certain	Wharton Industrial Estate, Wharton Road (Repossessions UK Ltd), Winsford	Housing	205	Dwellings
Near Certain	99 Chester Road, Winsford	Housing	3	Dwellings
Near Certain	Spruce Cottage, 2 Hockenhull Lane, Tarvin	Housing	1	Dwellings
Near Certain	Land at Wharton Green, Deakins Road / Bostock Road, Winsford	Housing	96	Dwellings
Near Certain	Montrose, Chester Road, Kelsall	Housing	3	Dwellings
Near Certain	Land adjacent Watling Heys, Chester Road, Kelsall	Housing	6	Dwellings
Near Certain	The Nursery, Chester Road, Kelsall	Housing	5	Dwellings
Near Certain	Land adjacent to Ardern Place, Chester Road, Kelsall	Housing	1	Dwellings
Near Certain	Land to rear of The Farmers Arms, Chester Road / Waste Lane, Kelsall	Housing	1	Dwellings
Near Certain	The Gables, Chester Road, Oakmere, Northwich	Housing	3	Dwellings
Near Certain	Brownhayes Farm (workshop), Yateshouse Lane, Byley, Northwich	Housing	1	Dwellings
More Than Likely	Land adjacent 11 Station Road, Delamere Northwich	Housing	1	Dwellings

Near Certain	Easy Life GM Ltd, Chester Road, Oakmere	Housing	2	Dwellings
Near Certain	Oakmere Lodge Country Park, Chester Road, Oakmere	Housing	1	Dwellings
More Than Likely	Land at Newton House, Weaverham Road, Cuddington, Northwich	Housing	1	Dwellings
Near Certain	Land at 437 Chester Road, Hartford, Northwich	Housing	1	Dwellings
Near Certain	Land at Greenbank Wood (Phase 5 and 6), School Lane, Hartford, Northwich	Housing	258	Dwellings
Near Certain	Land at Dunham Road, Northwich	Housing	6	Dwellings
Near Certain	Land at The Hollies, 79 School Lane, Hartford	Housing	7	Dwellings
Near Certain	Abbey Lodge Abbey Lane Hartford, Northwich	Housing	2	Dwellings
Near Certain	Land adjacent 11B The Crescent, Hartford	Housing	1	Dwellings
Near Certain	Land at Grange Farm, Chester Road, Hartford	Housing	8	Dwellings
Near Certain	Land adjacent Leftwich Farm, 2 Dobells Road, Northwich	Housing	4	Dwellings
More Than Likely	Land at Weaver Shipyard, Saxons Lane, Northwich	Housing	83	Dwellings
Near Certain	Land at Hartford High School, Greenbank Lane, Northwich	Housing	26	Dwellings
Near Certain	Hartford Campus, Chester Road, Hartford, Northwich	Housing	82	Dwellings
Near Certain	Land at Flower Street, Northwich	Housing	2	Dwellings
More Than Likely	Land at Keepers Lane/Northwich Road, Weaverham	Housing	1	Dwellings
Near Certain	Yew Tree Farm, Middlewich Road, Nether Peover, Northwich	Housing	3	Dwellings
More Than Likely	Land adjacent 2 Russet Road, Weaverham, Northwich	Housing	1	Dwellings
More Than Likely	Land at Oldhams Hill, Winnington Street, Northwich	Housing	1	Dwellings
More Than Likely	Land and buildings off Oldhams Hill/Verdin Avenue, Northwich	Housing	6	Dwellings
Near Certain	Domestic Discount, 35 Station Road, Northwich	Housing	15	Dwellings
Near Certain	Car park opposite Plaza Bingo Club, Albion Road, Northwich	Housing	9	Dwellings
Near Certain	Land adjacent Labour Hall, Tabley Street, Northwich	Housing	34	Dwellings
Near Certain	1Weaverham Bank Farm, High Street, Weaverham, Northwich	Housing	8	Dwellings
Near Certain	Weaverham Bank Farm, High Street, Weaverham, Northwich	Housing	8	Dwellings
Near Certain	West Road Garage, 2 West Road, Weaverham Northwich	Housing	9	Dwellings
Near Certain	Land adjacent 162 Manchester Road, Northwich	Housing	49	Dwellings

Near Certain	Land adjacent 16 Brook Street, Northwich	Housing	1	Dwellings
Near Certain	Land at Warrington New Road, Wincham	Housing	103	Dwellings
Near Certain	Land to rear of 14 Station Road, Lostock Gralam, Northwich	Housing	1	Dwellings
Near Certain	Land off Chapel Street, Wincham, Northwich	Housing	6	Dwellings
Near Certain	80 Townfield Lane, Barnton, Northwich	Housing	4	Dwellings
Near Certain	Arosa, Linnards Lane, Wincham, Northwich	Housing	1	Dwellings
Near Certain	Land adjacent Comberbach Sorting Office, 12 Senna Lane, Comberbach	Housing	1	Dwellings
More Than Likely	Land at Chapel Street(1), Wincham, Northwich	Housing	960	Dwellings
Near Certain	M6 -J17(1), Sandbach	Retail	862.6	m2
Near Certain	M6 -J17(2), Sandbach	Retail	862.6	m2
Near Certain	M6 -J17(3), Sandbach	Office	862.6	m2
Near Certain	M6 -J17(4), Sandbach	Retail	862.6	m2
Near Certain	M6 -J17(5), Sandbach	Retail	862.6	m2
More Than Likely	M6 -J17(6), Sandbach	Office	14000	m2
More Than Likely	M6 -J17(7), Sandbach	Office	14000	m2
More Than Likely	M6 -J17(8), Sandbach	Office	7200	m2
More Than Likely	M6 -J17(9), Sandbach	Retail	4500	m2
More Than Likely	Holmes Chapel Road(1), Middlewich. Ma6nitude 160, Midpoint 18 DB symetry	Office	7450.5	m2
More Than Likely	Holmes Chapel Road, Middlewich. Ma6nitude 160, Midpoint 18 DB symetry	Office	7450.5	m2
Near Certain	1ERF way Middlewich	Office	21000	m2
Near Certain	ERF way Middlewich	Office	21000	m2
Near Certain	Pochin Way(1) Middlewich, Midpoint 18	Office	5280	m2
Near Certain	Pochin Way(2) Middlewich, Midpoint 18	Office	12320	m2
More Than Likely	Pochin Way(3) Middlewich, Midpoint 18	Office	7869.4	m2
More Than Likely	Pochin Way(4) Middlewich, Midpoint 18	Industrial	3372.6	m2

Near Certain	Pochin Way(5) Middlewich, Midpoint 18	Industrial	16100	m2
Near Certain	Pochin Way(6) Middlewich, Midpoint 18	Industrial	6900	m2
More Than Likely	2Land to the south of A556, Rudheath, Northwich (south west Gadbrook Park)	Office	0	m2
More Than Likely	Land at Chapel Street (2), Wincham, Northwich	Office	2500	m2
Near Certain	1Land rear Swan House, Wincham Lane, Wincham	Office	4225	m2
Near Certain	2Land rear Swan House, Wincham Lane, Wincham	Industrial	2124	m2
Near Certain	3Land rear Swan House, Wincham Lane, Wincham	Office	2124	m2
More Than Likely	Land on Denton Drive Industrial Estate	Office	6000	m2
Near Certain	Natrium House, Winnington Lane, Northwich	Industrial	13262	m2
Near Certain	1Winnington Bus' Park, Winnington Ave, Northwich	Industrial	5880	m2
Near Certain	Winnington Bus' Park, Winnington Ave, Northwich	Office	1740	m2
More Than Likely	1Land on Gadbrook Employment Park, Rudheath	Office	30000	m2
Near Certain	Land at Gadbrook Park, Rudheath, Northwich	Office	518	m2
Near Certain	1Rear of 201 to 225 Middlewich Road, Northwich	Office	394	m2
Near Certain	2Rear of 201 to 225 Middlewich Road, Northwich	Industrial	286	m2
Near Certain	3Rear of 201 to 225 Middlewich Road, Northwich	Office	286	m2
Near Certain	Land off Holmes Chapel Road Middlewich (Cheshire Fresh) - Area 2	Office	265	m2
Near Certain	Land off Holmes Chapel Road Middlewich (Cheshire Fresh) - Area 3	Office	7154	m2
Near Certain	1Land off Holmes Chapel Road Middlewich (Cheshire Fresh) - Access hub, pond and road	Industrial	884	m2
Near Certain	2Land off Holmes Chapel Road Middlewich (Cheshire Fresh) - Access hub, pond and road	Retail	264	m2
Near Certain	3Land off Holmes Chapel Road Middlewich (Cheshire Fresh) - Access hub, pond and road	Retail	4143	m2
Near Certain	1(Phase 2, Plot 1) Land east of Road One, Winsford	Office	1540	m2
Near Certain	2(Phase 2, Plot 1) Land east of Road One, Winsford	Industrial	13775	m2
Near Certain	Land east of Road One (1), Winsford	Retail	316	m2
Near Certain	Land east of Road One (2), Winsford	Retail	566	m2
Near Certain	Land east of Road One (3), Winsford	Retail	467	m2
Near Certain	Land east of Road One (4), Winsford	Industrial	8410	m2
Near Certain	Land east of Road One (5), Winsford	Office	23225	m2

Near Certain	Land east of Road One (6), Winsford	Retail		m2
Near Certain	Land adjacent to 15 Road Five Winsford	Office		m2
More Than Likely	Land At Grid Ref 363001 365454 Browning Way Winsford	Industrial	1858	m2
More Than Likely	Land at Littler Lane / Oakemere Road, Winsford	Office	59000	m2
More Than Likely	Dingle Lane(1), Winsford, CW7 1AB	Retail	403.8	m2
More Than Likely	Dingle Lane(2), Winsford, CW7 1AB	Office	403.8	m2
More Than Likely	Dingle Lane(3), Winsford, CW7 1AB	Retail	403.8	m2
More Than Likely	Dingle Lane(4), Winsford, CW7 1AB	Retail	403.8	m2
More Than Likely	Dingle Lane(5), Winsford, CW7 1AB	Retail	403.8	m2
Near Certain	Midpoint 18Unit 13_NotDependent	Industrial	4366	m2
Near Certain	Midpoint 18Unit 14_NotDependent	Industrial	1394	m2
Near Certain	Midpoint 18Unit 31_Dependent	Office	59260	m2
Near Certain	Midpoint 18Unit 32_Dependent	Office	11641	m2
Near Certain	Midpoint 18Unit 33_Dependent	Office	13935	m2
Near Certain	Midpoint 18Unit 34_Dependent	Industrial	4924	m2
Near Certain	Midpoint 18Unit 35_Dependent	Industrial	5388	m2
Near Certain	Midpoint 18Unit 41_NotDependent	Office	28800	m2
Near Certain	Midpoint 18Unit 42_NotDependent	Industrial	42550	m2
Near Certain	Midpoint 18Unit 43_NotDependent	Industrial	4181	m2
Near Certain	Midpoint 18Unit 44_NotDependent	Industrial		m2
Near Certain	Midpoint 18Unit 130_Dependent	Industrial	6596	m2
Near Certain	Midpoint 18Unit 140_Dependent	Industrial	4645	m2
Near Certain	Midpoint 18Unit 141_Dependent	Industrial	4645	m2
Near Certain	Midpoint 18Unit 150_Dependent	Industrial	7432	m2
Near Certain	Midpoint 18Unit 151_Dependent	Industrial	3716	m2
Near Certain	Midpoint 18Unit 152_Dependent	Industrial	2880	m2

Near Certain	Midpoint 18Plot 63_NotDependent	Industrial	34160	m2
Near Certain	Midpoint 18Plot 63 Phase 2_NotDependent	Industrial	11427	m2
Near Certain	Midpoint 18Other development_Dependent	Industrial	22258.5	m2
Near Certain	Midpoint 18Other development2_Dependent	Industrial	22258.5	m2
Near Certain	Midpoint 18Plot 51_NotDependent	Office	24857.4	m2
Near Certain	Midpoint 18Unit 11_NotDependent	Office	12320	m2
Near Certain	Midpoint 18Unit 12_NotDependent	Industrial	5280	m2