Leicestershire County Council

MELTON MOWBRAY DISTRIBUTOR ROAD

Full Business Case

70092962
DECEMBER 2022

CONFIDENTIAL

Leicestershire County Council

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Full Business Case

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EXECUTIVE SUMMARY

This document is the Full Business Case (FBC) for the North and East Melton Mowbray Distributor Road (NEMMDR) Scheme.

The scheme is designed to tackle longstanding congestion and traffic related problems in Melton Mowbray, enabling and facilitating local development and growth. The NEMMDR route consists of single carriageway road and extends from the A606 Nottingham Road at the north-western edge of the town to the A606 Burton Road in the south, crossing Scalford Road, Melton Spinney Road, A607 Thorpe Road and B676 Saxby Road to Burton Road.

The scheme will create new junctions with the radials on its route and provide crossings over the railway line and the River Eye.

The Outline Business Case (OBC) for the scheme was submitted to the Department for Transport (DfT) in December 2017 which successfully secured £49.5m of provisional Government funding through the DfT Large Local Major Schemes Fund in May 2018. Subsequently, the planning application for NEMMDR was submitted in October 2018 and consent granted in May 2019.

The Compulsory Purchase Order (CPO) and Side Roads Order (SRO) notices for the NEMMDR were submitted to the Secretary of State for confirmation on 21 October 2020. Following a Public Inquiry in September/October 2021, the CPO and SRO were confirmed in March 2022.

This FBC details the status of NEMMDR across each of the five elements of the Business Case.

STRATEGIC CASE

The Strategic Case shows that investment in the scheme is needed at this time, articulating the rationale for investment and sets out alignment with the strategic goals of the UK Government, Leicestershire County Council (LCC) and the adopted Melton Mowbray Local Plan.

Melton has a historic and constrained town centre network that is at the convergence of six major routes. Levels of congestion are some of the highest on a per mile basis in the County, with the main cause of the congestion in the town being through and cross-town traffic; with high levels of Large Goods Vehicle (LGV) and Heavy Goods Vehicle (HGV) movements.

Within the town, high levels of traffic are already presenting barriers to travel, alongside the high level of anticipated development proposed in the adopted Local Plan. Together with the associated employment and homes the problems are expected to be exacerbated in the future as a result of a growth in demand for travel. This is also likely to have an impact on the attractiveness of the town to visitor economy, curtailing the extent and attractiveness of the historic market town centre.

This is of particular concern, given the proportion of traffic that is HGV and LGV, both as a percentage of overall traffic and absolute volumes, with the corresponding noise, safety, severance and air quality problems also brought by these movements, alongside significant forecast growth of such movements in the future.

The forecast increase in travel demand and congestion without any intervention will also make implementation of improvements to public transport and active travel provision impractical.

Consideration of a wide range of options through engagements with multiple stakeholders, covering all modes and scales of options, including public transport, highway infrastructure, traffic demand management (e.g. park and ride), land-use changes and cycling and pedestrian improvements, concluded that the NEMMDR provided the preferred scheme option. The scheme provides:

- A highly significant increase in the level of user benefits to the next nearest option (60%);
- The greatest benefit for through traffic, and thus to the town centre and critically constrained junctions as a result;
- Support through consultation results, with a majority of Melton residents expressing that they agreed with the preferred route;
- A lower cost than a similar route to the west, with consequential impacts on the Economic Case and ability of Government to fund (and afford) the scheme;
- The ability to deliver the full extent of housing and employment growth proposed in the adopted Local Plan; unlike the Northern or Southern sections on their own;
- The highest score on almost all qualitative scheme objectives compared to alternative options, assessed from the perspective of three different transport groups; and
- The greatest opportunity to support walking, cycling public transport and urban realm improvements in the town as a result.

ECONOMIC CASE

The Economic Case assesses the impacts of the preferred scheme, and the resulting value for money. It has been assessed using of the latest version of the Leicester and Leicestershire Integrated Transport Model, supported by DfT and industry standard software usage. The model and appraisal approach has been built in accordance with the DfT's modelling and appraisal guidance (TAG) and has been independently assured in terms of its development and usage.

The Benefit Cost Ratio for the scheme has been calculated based on the scheme benefits and scheme costs. Scheme benefits have been monetised where possible or assessed qualitatively if not. The total adjusted present value of scheme benefits is estimated to be £144.5m (present value). The scheme cost is £61.2m (present value), including 20% optimism bias consistent with the advice in TAG.

Overall, the scheme is assessed to be High Value for Money (VfM), based on the central estimate of monetised impacts. The initial BCR of the central case is 1.95, with an adjusted BCR of 2.36.

The largest scheme benefits are journey time and vehicle operating cost saving for road users (business user benefits are £44.6m and commute and other user benefits are £58.4m). The scheme is forecast to lead to some monetised environmental disbenefits, including greenhouse gases and accidents, at £2.8m and £4.1m respectively, due to overall increased car travel. Positive monetised environmental benefits include noise and air quality impacts, at £3.8m and £0.6m respectively. Some health benefits, through increase in active mode use is also expected, monetised at £0.4m. The scheme is expected to deliver positive wider economic impacts through agglomeration, labour supply and output impacts, totalling £20.0m. Journey time reliability impacts are also positive at £5.4m.

Overall, the non-monetised impacts are likely to be negative, with the most significant impact being a moderate adverse impact on the historic environment, with all other impacts being slight or neutral. The non-monetised impacts are not likely to impact the VfM category.

1.1.1. Considering alternative scenarios of traffic growth, the VfM remains in the High category in the low traffic growth scenario with an adjusted BCR of 2.03; similarly, the high traffic shows High VfM with

an adjusted BCR of 2.62. The impact of alternative network assumptions, e.g. accelerated delivery of the Southern Link Road, on the scheme benefits is minimal and this doesn't affect the VfM category.

FINANCIAL CASE

The base scheme costs are £94.5m in 2022 prices, and include land costs, construction costs and preparation costs.

The FBC includes a detailed breakdown of the base scheme costs into these spend areas, including an anticipated profile by year for each spend area. To these base costs, risk allowances have been added (as determined through a detailed Quantified Risk Analysis), along with inflation to the year of forecast expenditure.

The total local contribution towards the scheme cost is 39%.

A third-party contribution of £14m is anticipated, which will come from private sector (developer) contributions, through Community Infrastructure Levy (CIL) and S106 agreement.

COMMERCIAL CASE

The Commercial Case provides evidence of the commercial viability of the scheme and the chosen procurement strategy. It presents evidence on risk allocation and transfer, contract timescales and implementation timescales as well as details of the capability and skills of the LCC team and the contracted service provider delivering the project.

LCC considered a full range of procurement options at the OBC stage, to secure best value through ensuring a strong, fair and open competition, in line with best practice for managing public money. The Preferred Option for procurement and delivery was the Midlands Highways Alliance (MHA) (which has now advanced to the Midlands Highway Alliance Plus (MHA+)) and the Medium Schemes Framework (MSF3). The benefits of this route for both LCC and ensuring taxpayer value have been made clear in the Commercial Case.

The appointed contractor for the scheme, Galliford Try, was selected through a mini competition (Option 2 in the MSF3 framework) Using a NEC4 Option C - Target Cost with Activity Schedule form of contract.

The approach builds on LCC's experience with such delivery mechanisms on recent and successfully delivered schemes, with a clear understanding between contractor and authority of how they work and what their processes are. This is not just in terms of roles, but also agreed standards, mechanisms and clarity over risk and risk allocation and transfer through the design and construction phases.

MANAGEMENT CASE

The Management Case demonstrates that LCC and the selected contractor, Galliford Try, have successfully procured and delivered a number of similar projects of varying sizes and complexity.

The knowledge gained and the strategic procedures developed/adopted during the delivery of these schemes will be used for the delivery of the NEMMDR, using similar team structures and experienced personnel, who are confirmed as available and committed to the NEMMDR project.

Opportunities will be taken, wherever possible, to improve delivery processes by acting upon the lessons learnt from recent schemes.

The project governance structure for any scheme undertaken by LCC consists of a three-tier structure, in this case as follows:

- The Programme Board – Provides governance at the overall programme level;
- The NEMMDR Project Board – Provides governance for the specific NEMMDR project; and
- Delivery Teams – Responsible for particular issues, topic areas or activities spanning two or more of the component products via a series of Working Groups.

To ensure the successful delivery of the scheme, LCC has established a governance structure for the NEMMDR project. This includes both internal audit, and external project assurance, with the Senior Responsible Owner (SRO) having direct responsibility for these for the NEMMDR Project.

Galliford Try were appointed through the Midlands Highway Alliance Plus (MHA+) and the Medium Schemes Framework (MSF3) to work with Leicestershire County Council (LCC) and their designers, AECOM, to deliver an Early Contractor Involvement (ECI) service for the NEMMDR.

LCC recognises that effective risk management is vital, and a continual process involving the identification and assessment of risks. A risk and opportunity register was developed May 2017 and have been continually updated on a monthly basis to reflect change as the scheme progressed. As the project progressed it was deemed necessary to split the risk registers up and there are currently three risk registers (project risk, design risk and construction risk), which provide up-to-date input in line with the Project Governance.

A Benefits Realisation Plan has been prepared, linked to the scheme objectives and desired outcomes. This will be used by LCC to ensure that the benefits and dis-benefits from the project to can be planned, tracked, managed, and realised (or mitigated).

A Monitoring and Evaluation Plan has also been prepared and approved by DfT, and this plan will be used to help demonstrate whether the scheme objectives identified in the Strategic Case are being achieved in terms of the desired “measures for success”. In addition, the Management Case also highlights the ongoing stakeholder management plans, and the future communication strategy plans and programme.

The Management Case concludes that LCC has a track record of successfully procuring and delivering projects of varied size and complexity, and in relation to the NEMMDR scheme has the adequate project management, governance and assurance systems in place, alongside the resources required, to deliver the NEMMDR.

1

INTRODUCTION

1 INTRODUCTION

1.1 OVERVIEW

1.1.1. This document is the Full Business Case (FBC) for the North and East Melton Mowbray Distributor Road (NEMMDR) Scheme, following on from the Outline Business Case (OBC) which was submitted to the Department for Transport (DfT) in December 2017.

1.1.2. This scheme is designed to tackle longstanding congestion and traffic related problems in Melton Mowbray, enabling and facilitating the acceleration of significant housing and employment growth. The reduction in congestion will improve conditions for travellers in and around the town.

1.1.3. Melton Mowbray has a historic and constrained town centre network that is at the convergence of six major routes. Levels of congestion are some of the highest on a per mile basis in the County, with the main cause of the congestion in the town being through and cross-town traffic; with high levels of LGV and HGV movements.

1.1.4. Alongside current levels of congestion, numerous planning applications, totalling 2,500 dwellings, are already approved, submitted or coming forward in the town as part of the overall housing and employment growth in the adopted Melton Local Plan, and is why the scheme is needed now.

1.1.5. The adopted Local Plan incorporates significant levels of growth, with 6,125 dwellings and over 3,400 jobs to be delivered in the Plan period. This represents a growth in the size of the town of over 35%, with the NEMMDR providing substantial and sustained support for that growth.

1.2 LOCATION OF THE SCHEME

1.3.1. The scheme consists of the construction of a single carriageway road, to the north and east of Melton Mowbray. The route extends from the A606 Nottingham Road at the north-western edge of the town to the A606 Burton Road in the south, crossing Scalford Road, Melton Spinney Road, A607 Thorpe Road and B676 Saxby Road to Burton Road.

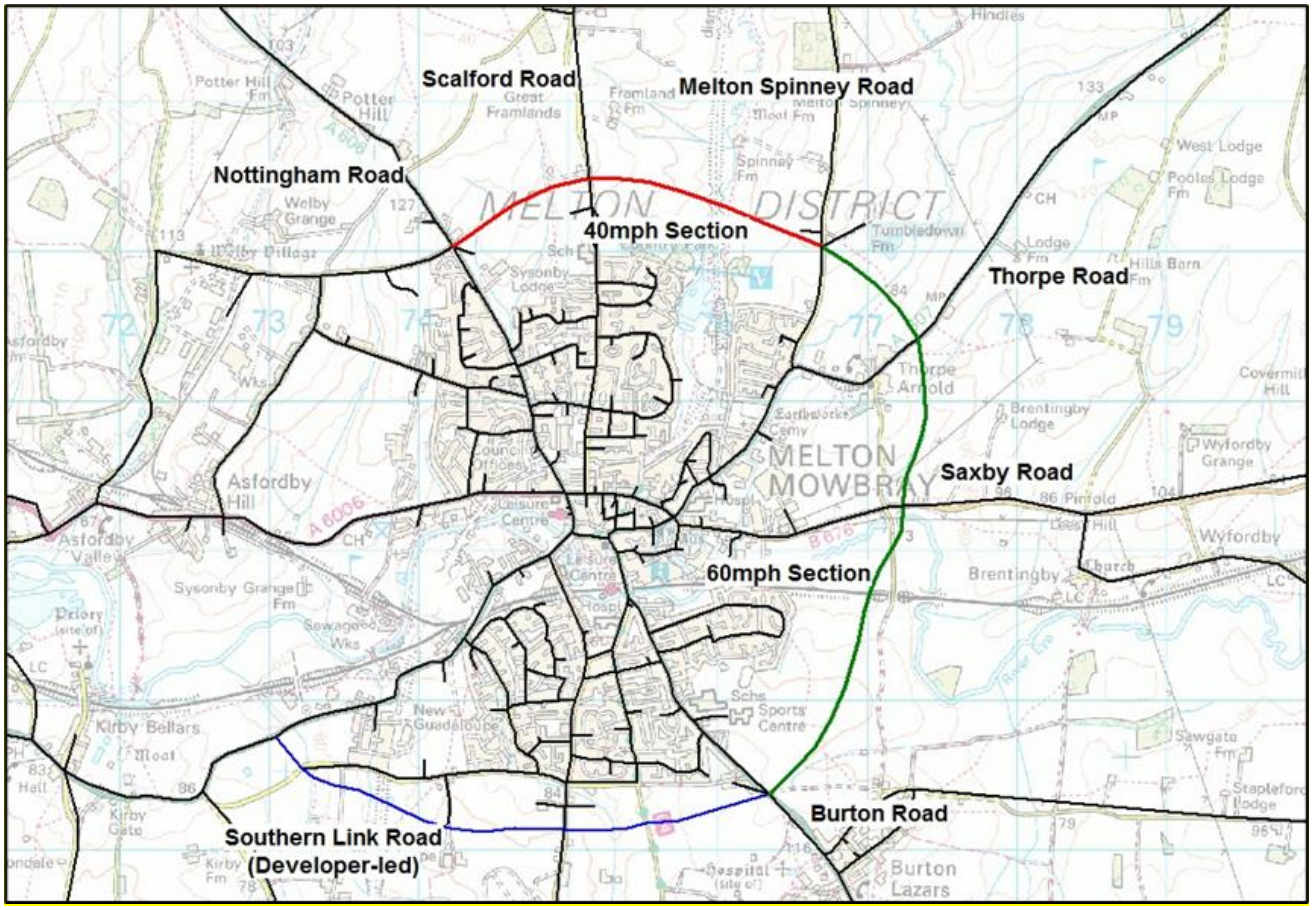
1.3.2. It will provide connection to the masterplan to the south of Melton Mowbray, which in turn will provide highways infrastructure that connects to the A607 Leicester Road. The scheme will create new junctions with the radials on its route and provide crossings over the railway line and the River Eye.

1.3.3. The location of the proposed scheme and of key adjoining roads is shown in Figure 1-1.

1.3.4. The Southern section (the Southern Link), shown in blue is being developed under the Housing and Infrastructure Fund (HIF) sponsored by Homes England. The Southern Link is intended to serve the planned Southern Sustainable Neighbourhood in Melton Mowbray and will connect with the NEMMDR at the A606.

1.3.5. The Southern Link is not part of the NEMMDR, and the case for the NEMMDR is not contingent on its delivery. The Southern Link is identified in Melton Borough Council's adopted Local Plan as part of the Southern Sustainable Neighbourhood.

Figure 1-1 - Scheme Location & Context



1.4 BACKGROUND TO THE BUSINESS CASE

1.4.1. In May 2018 the DfT announced that the project had successfully secured £49.5m of provisional Government funding following the Outline Business Case bid to the DfT Large Local Major Schemes Fund. Subsequently, the planning application for NEMMDR was submitted in October 2018 and granted in May 2019.

1.4.2. The Compulsory Purchase Order (CPO) and Side Roads Order (SRO) notices for the NEMMDR were submitted to the Secretary of State for confirmation on 21 October 2020. Following a Public Inquiry in September/October 2021, the CPO and SRO were confirmed in March 2022.

1.5 PURPOSE OF THIS DOCUMENT

1.5.1. The purpose of this document is to support the final approval of the Large Local Majors funding to enable delivery of the scheme. The DfT has provided guidance on the preparation of transport business cases, which itself is informed by the guidelines on evidence-based decision-making set out in HM Treasury's Green Book. This advocates the use of the five-part approach to making a business case. This considers whether schemes:

- are underpinned by a clear 'case for change' that is in line with wider public policy objectives – the 'Strategic Case';
- show value for money – the 'Economic Case';
- are commercially viable – the 'Commercial Case';

- are financially affordable – the 'Financial Case'; and
- are achievable – the 'Management Case'.

1.5.2. Ministers consider the evidence in all five cases when deciding on schemes that require Government support.

1.5.3. This document has been prepared using the tools and guidance provided by the DfT, including TAG, to ensure the evidence it offers is rigorous and consistent.

1.6 STRUCTURE OF THIS DOCUMENT

1.6.1. The structure of this document aligns with the DfT's guidance on Transport Business Cases, which was updated in August 2021. The document is structured as follows:

- Chapter 2 sets out the Strategic Case;
- Chapter 3 sets out the Economic Case;
- Chapter 4 sets out the Financial Case;
- Chapter 5 sets out the Commercial Case; and
- Chapter 6 sets out the Management Case.

2

STRATEGIC CASE

2 STRATEGIC CASE

2.1 INTRODUCTION

2.1.1. The North and East Melton Mowbray Distributor Road (NEMMDR) is part of the Melton Mowbray Transport Strategy and represents the preferred option and alignment from a comprehensive options assessment exercise to reduce congestion in the town, enable and accelerate housing and employment delivery as part of the adopted Local Plan.

2.1.2. The Strategic Case seeks to show that investment in the scheme is needed at this time. In demonstrating the case for change, it articulates the rationale for investment and sets out how the NEMMDR aligns with the strategic goals of the UK Government, Leicestershire County Council and the adopted Local Plan.

2.1.3. This chapter sets out:

- The problems that have been identified and the evidence for intervening to solve these problems;
- The socio-economic drivers outlining the evidence of need for the scheme;
- The objectives of the scheme;
- The criteria for determining whether the scheme has successfully delivered these objectives;
- The scope of the scheme;
- Constraints and opportunities;
- The interdependencies on which delivery of the scheme will be contingent;
- Details of the key stakeholders; and
- Strategic fit.

2.2 EVIDENCE OF NEED

2.2.1. Congestion in the centre of Melton Mowbray has been a long-standing issue recognised by both Leicestershire County Council and Melton Borough Council; and this can be dated back to the late 1990's and early 2000's, and through successive Local Transport Plans.

2.2.2. However, the issue has become increasingly pronounced and is likely to be exacerbated further, both in terms of recent trends in traffic growth prior to the Covid pandemic, and in light of the significant levels of growth planned for the town as part of the adopted Local Plan.

2.2.3. Historically, options considered over this period have generally been developed to tackle existing congestion issues, rather than simultaneously focusing on improving network conditions and accommodating and accelerating the high levels of housing and employment growth now proposed in the town.

2.2.4. Importantly, a significant number of dwellings (totalling nearly 2,500) are currently part of active planning applications in the town, as part of the adopted Local Plan which proposes delivery of 6,125 dwellings in Melton Mowbray in the Local Plan period (2011 – 2036).

2.2.5. It is both the current levels of congestion in Melton Mowbray, and the active nature of these applications that make the scheme a priority, and why it is needed now.

2.2.6. In 2015 and 2016, work undertaken on the Transport Strategy Evidence Base and the Melton Mowbray Options Appraisal Report (OAR) highlighted the levels of congestion, the significant through traffic and the limited spare capacity for growth as critical issues facing the town.

2.2.7. The OAR tested a range of schemes, including smaller-scale public transport, walking and cycling, demand management and inner bypass improvements in close proximity to the town centre. This led to an assessment, against a range of criteria, of over 60 different potential interventions for the town across these modes to identify the better performing options. This assessment was derived from the evidence base of existing conditions and used the local Melton Mowbray transport stakeholder reference groups as part of the decision-making process.

2.2.8. Testing of a wide range of strategic highways options demonstrated that a North and East Distributor Road was the preferred option for solving congestion problems in the town and for accelerating housing delivery and economic growth (this was shown through assessment of transport user benefits, costs, wider economic benefits and a range of locally-led objectives).

2.2.9. This scheme is one part of a wider transport strategy for the town which will include other measures to address localised traffic issues, public transport improvements, walking and cycling connectivity.

2.3 PROBLEM IDENTIFIED

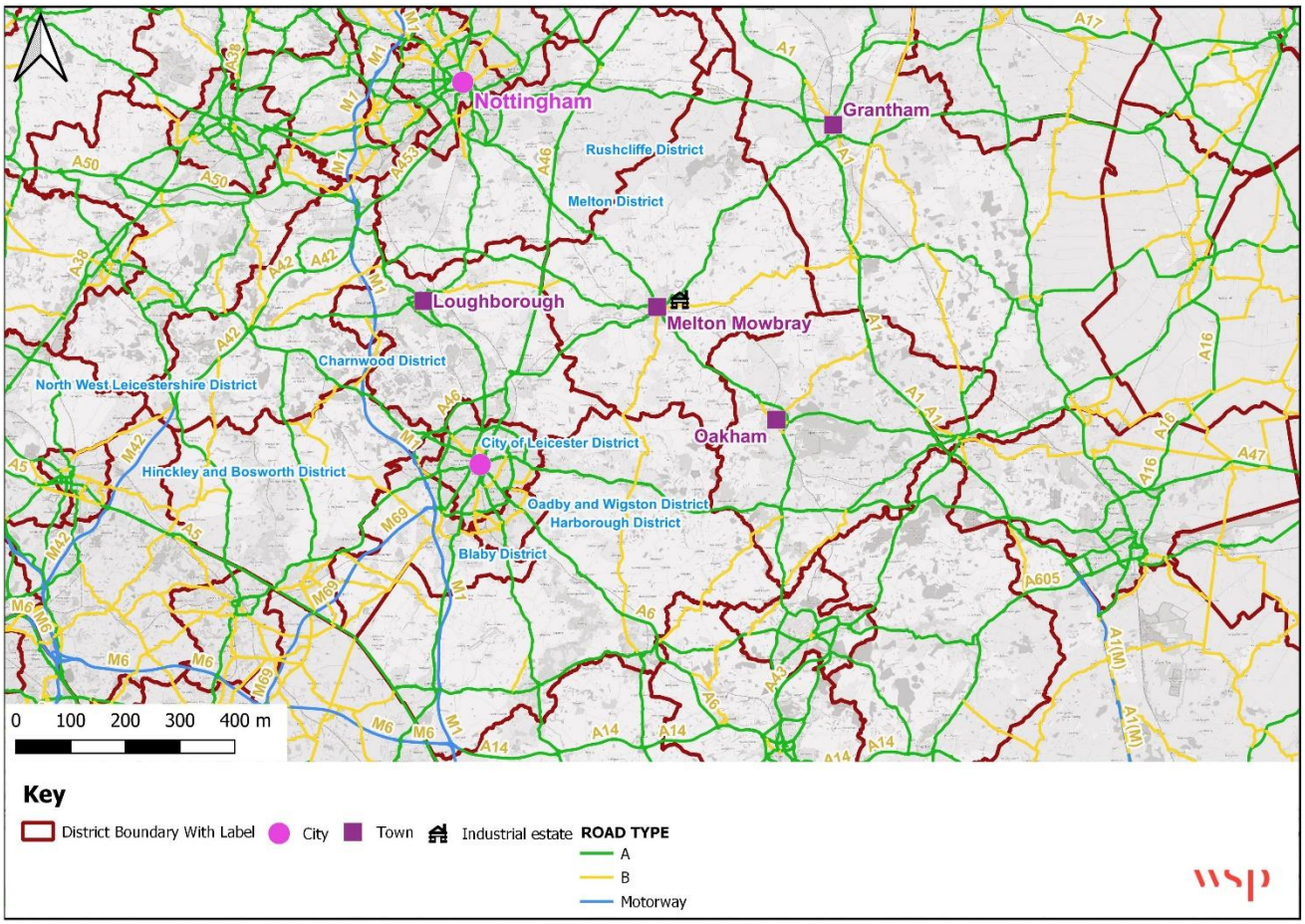
BACKGROUND

2.3.1. The town of Melton Mowbray is located in the Borough of Melton in the north-eastern corner of the county of Leicestershire, approximately 15 miles north-east of Leicester, 17 miles south-east of Nottingham and 15 miles east of Loughborough.

2.3.2. The population of the town is just over 25,000, which represents just over half of the 50,000 people who live in the Borough of Melton.

2.3.3. The size of Melton Mowbray is important context when considering the proposed growth of the town in the adopted Local Plan, and the level of live planning applications.

Figure 2-1 - Melton Mowbray Geographical Context



MELTON'S LOCATION & NETWORK CONNECTIVITY

2.3.4. In terms of travel patterns from significant origins, around 1,000 people commute to the Borough of Melton to work from Charnwood and Leicester, and around 500 commute from Rushcliffe and Rutland. Conversely, around 1,800 residents of the Borough of Melton travel to work in Leicester, while roughly 1,000 commute to Charnwood, 1,000 to Rutland, and 850 to Nottingham.

2.3.5. Overall, there is a current net outflow of 4,000 people from the Borough of Melton commuting to other districts, with around 6,000 people commuting into the Borough for work and 10,000 leaving it.

2.3.6. This contributes to the through-traffic issue in Melton Mowbray, since not all employment is located in the centre of the town, in-commuters must cross the town to reach employment locations on the edge of the town. The scale of commuting in and out of the town is also a factor behind the scale of future employment provision which will help provide an enhanced local labour market for the town's key industries, and its national and international importance and reputation for food production in particular.

2.3.7. In terms of connectivity to other key economic centres in the Midlands, the town is connected to Nottingham and Oakham by the A606 and to Leicester and Grantham (and the A1) by the A607. These connections require people to travel through Melton Mowbray's town centre.

2.3.8. These routes provide the strategic connectivity to Melton Mowbray but are also a key source of through-traffic issues, especially in terms of access to Leicester, Nottingham and the A1.

2.3.9. The same radials also serve the town's residential neighbourhoods. The main industrial area is to the east of the town centre and is served by the B676 and the A607. Melton Mowbray's manufacturing and food production activities are typically located in this area, and include some of the country's largest food producers, including Just Egg Chilled Foods, Quadex, Pukka Pies, Sundeen and Mars.

2.3.10. These businesses serve a national and international marketplace, and as a result also generate significant HGV and LGV movements.

2.3.11. Frequent market days present a particular problem whereby the strong visitor economy to Melton Mowbray interacts with current levels of local and through-traffic demands. This results in levels of traffic being particularly high on these days, with capacity limitations on the network leading to consistent delay problems even outside of traditional peak periods.

2.3.12. Melton Mowbray is not directly served by the Strategic Road Network, but it is located roughly ten miles by car from the A46 to the west and 13 miles from the A1 to the east. This proximate location leads to re-routing of significant traffic through the town, particularly when accidents or incidents occur on the A46 or A1.

2.3.13. In addition, Melton is at a key strategic intersection of various major A roads, including the A606 and A607 which form part of the Major Road Network.

TOWN CENTRE CONSTRAINTS

2.3.14. The local highway network in Melton Mowbray consists of seven key radial routes, which are shown in Figure 2-6. These include the A606 and the A607, which bisect the town, along with Scalford Road, Saxby Road (B676), Dalby Road (B6047) and the A6006, which terminate in or on the edge of the town centre.

2.3.15. The River Eye and the railway line (a key east-west link between Birmingham, Leicester, Peterborough and Cambridge) both bisect the town just south of the town centre in two parallel lines running from east to west. The river and railway line create constraints for vehicular traffic in the town, and because of these physical constraints there are only a small number of routes possible for crossing the railway and river to access, or travel through, the town.

2.3.16. There are three north-south routes crossing the railway line (A607, Dalby Road B6047, and A606) and two north-south routes crossing the river (A607 and A606).

2.3.17. However, and importantly, traffic on any of these routes is funnelled onto the A607 in the town centre where there is significant congestion and delay from the convergence of these routes to a few key junctions. These include the junctions of the A607/A6006 (4), the junction of A607/ Leicester Road (2), the junction of A607/Thorpe Road (1), which are all circled red in Figure 2-6 below.

Figure 2-2 - Lorry turning from Leicester Street A606 to Leicester Road A607

Figure 2-3 - A606 Nottingham Road queuing with lorry mounting the pavement

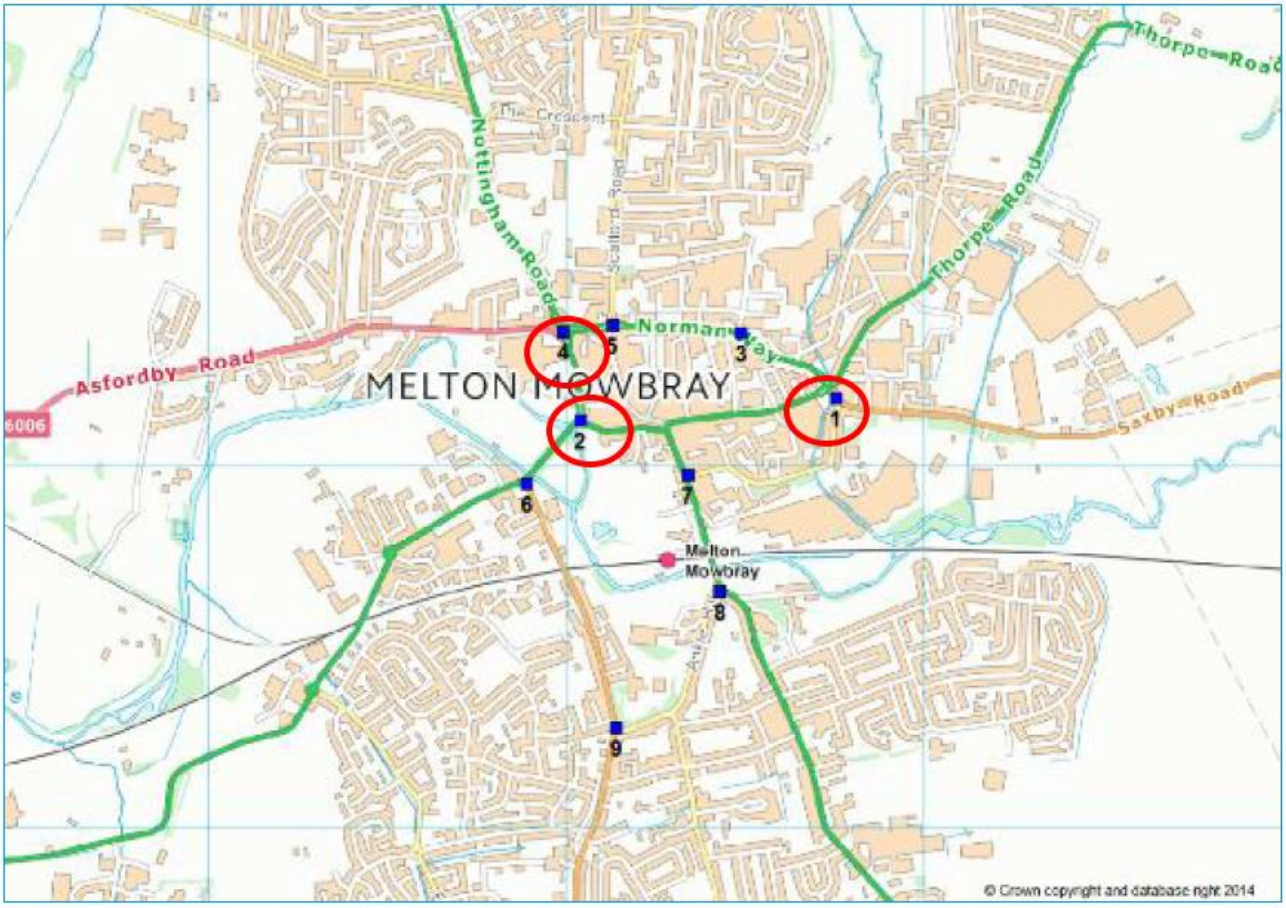
Figure 2-4 - A6006 Asfordby Road, looking towards Melton Town Centre

Figure 2-5 - B676 junction with A607 Thorpe End

2.3.18. Once these junctions reach capacity, further congestion issues are then experienced at a range of other junctions on the approaches to the town centre, and including the following locations as also highlighted in Figure 2-6.

1. A607/Thorpe End
2. A607/Leicester Street
3. A607/Snow Hill
4. A607/A6006/A606
5. A607/Scalford Road
6. A607/B6047 Dalby Road
7. A606/Mill Street
8. A606/Ankle Hill
9. B6047/Warwick Road

Figure 2-6 - Map of Melton Mowbray town centre, showing key traffic pinchpoints (1-9)



PUBLIC TRANSPORT & ACTIVE MODES

2.3.19. Melton Mowbray has a railway station, located south of the town centre, which is used for longer distance trips. Situated on the Birmingham to Peterborough line, there are direct services to Stanstead Airport, Cambridge, Ely, Peterborough, Nuneaton, Leicester and Birmingham New Street. However, there are no railway stations in the suburbs of the town or in the surrounding towns and villages; therefore, local public transport is comprised solely of bus services.

2.3.20. Currently, public transport plays a limited role in meeting the transport needs of the town and there is limited ability to enhance public transport services with the current level of through traffic in Melton Mowbray.

2.3.21. In the 2011 Census, for residents of the Borough of Melton, the mode share for bus was 2% and for rail it was 0.1%, compared to 72% for car and 15% for walking and cycling, which demonstrates that public transport is currently not popular.

2.3.22. Whilst there are currently 12 bus services that serve Melton Mowbray, frequencies are generally low, which requires users to plan their journeys in advance (rather than “turning up” to travel), and offer limited flexibility in terms of departure times. Service spans are limited with less frequent services in the evenings.

2.3.23. Bus routes within the town are short with very slow speeds as a result of being part of general traffic. Bus journey times are negatively affected by the same congestion encountered by other vehicles.

2.3.24. In recent years the town's bus network has contracted significantly, including the withdrawal or combination of some of the town's former suburban routes, as services have ceased to be commercially attractive and public funding available to cover loss-making services has reduced. The trends driving this contraction, including the reduction in passengers[1] and funding, look set to continue or perhaps even accelerate as a consequence of the Covid pandemic[2].

2.3.25. As part of the work carried out to develop Leicestershire County Council's Bus Service Improvement Plan, data was collected on attitudes on the use of bus services and measures that would encourage them to increase their bus travel through an online survey as part of a public engagement exercise. Analysis was also carried out to identify the county's key pinch points on the bus network.

2.3.26. A total of 1,483 responses were received to the online survey, which included councillors and representatives of various organisations. The survey results suggested more reliable journey times would encourage 44% of Leicestershire residents and visitors to increase their bus usage by a great deal, and 34% to some extent. In addition, quicker journey times would encourage 33% to increase their bus use by a great deal, and 39% to some extent.

2.3.27. Melton Mowbray was also identified as a pinch point on the Leicestershire bus network.

2.3.28. The above would indicate that any improvements to town centre traffic conditions, that will offer significant corresponding benefits for the public transport offer in Melton Mowbray too, are likely to lead to an increase in bus usage.

2.3.29. Bus services in the town are shown in Table 2-1 and Figure 2-7.

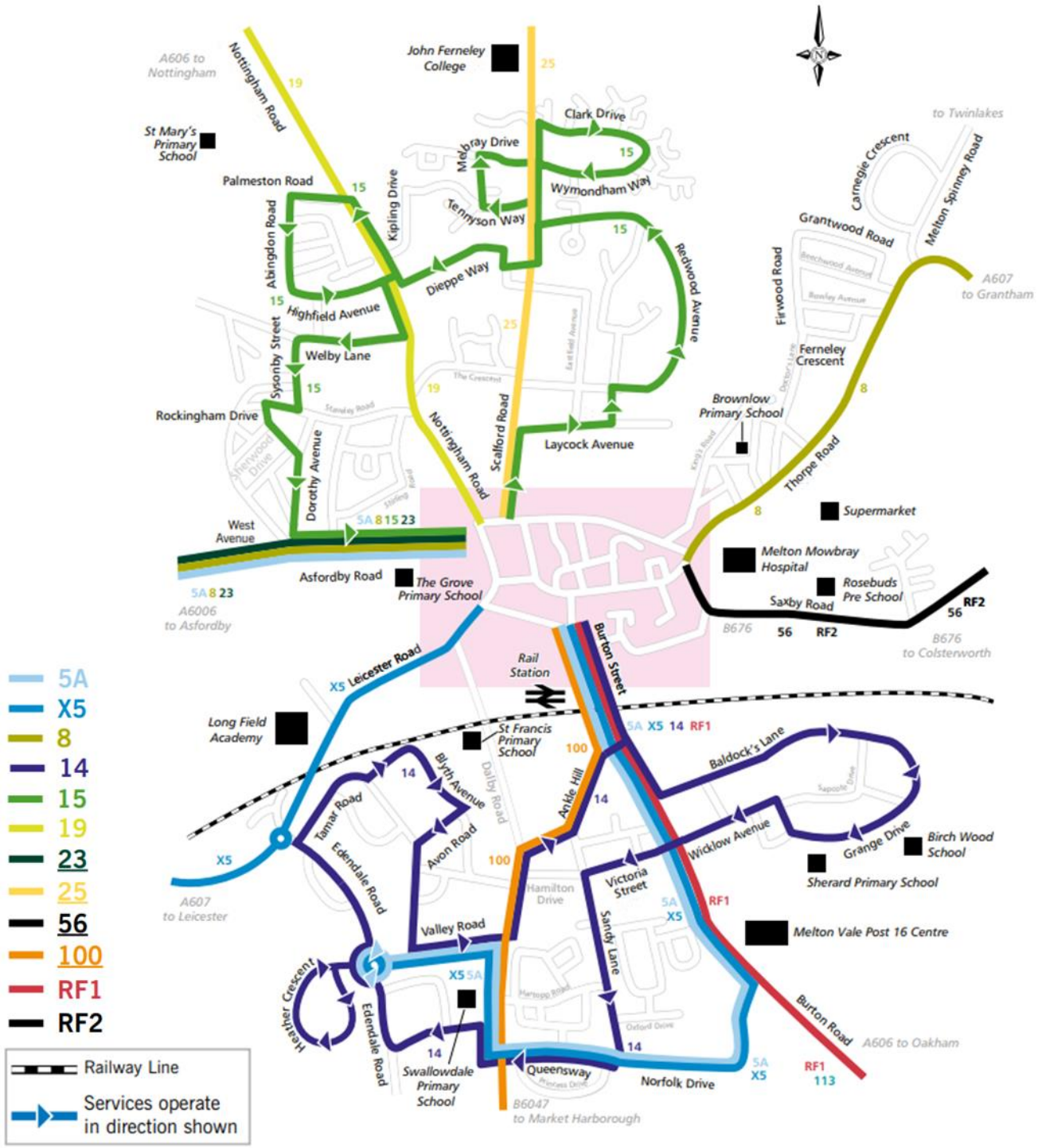
[1] Leicestershire Enhanced Partnership Plan, Leicestershire County Council, 2022

[2] Interim Melton Mowbray Transport Strategy, Leicestershire County Council, 2021

Table 2-1 – Details of bus services in Melton Mowbray (Leicestershire County Council, 2021)

Service	Operator/s	Route	Frequency	
			Mon – Sat Daytime	Evenings, Sunday and Bank Holidays
5A	Arriva	**MELTON MOWBRAY** (Queensway & Town Centre) - Rearsby - Syston - Leicester	30 mins	No service
X5	Arriva	**MELTON MOWBRAY** - Rearsby - Syston - Leicester	Daily	No service
8	Centrebus	Loughborough - **MELTON MOWBRAY**	Hourly; 2 hourly Sat	No service
14	Centrebus	**MELTON MOWBRAY** Town Service: (Grange Drive - Queensway - Tamar Road - Valley Road)	Hourly	No service
15	Centrebus	**MELTON MOWBRAY** Town Service: (Melbray Drive - Dieppe Way - Welby Lane)	Hourly	No service
19	Centrebus	Nottingham - **MELTON MOWBRAY** - Nottingham	2 hourly	No service
23	Centrebus	**MELTON MOWBRAY** - Old Dalby - Nether Broughton - Bottesford	Infrequent	No service
25	Centrebus	**MELTON MOWBRAY** - Scalford - Eastwell - Stathern	Infrequent	No service
56	Centrebus	**MELTON MOWBRAY** - Grantham via Buckminster	Infrequent	No service
100	Centrebus	**MELTON MOWBRAY** - Syston	2 hourly	No service
RF1	Centrebus	**MELTON MOWBRAY** - Oakham - Uppingham - Corby	Hourly	No service
RF2	Centrebus	Rutland Flyer **MELTON MOWBRAY** - Oakham	Infrequent	No service

Figure 2-7 - Map of bus services in Melton Mowbray (Leicestershire County Council, 2021)



2.3.31. Walking may be a more appealing alternative to car trips than bus or rail, not least because travel distances in the town are usually relatively short: it is less than three miles from the northern edge of the town to the southern edge and around 1.5 miles from east to west. The town should therefore be naturally conducive to walking, as well as cycling, for both commuting and leisure purposes.

2.3.32. The 2011 Census Travel to Work data showed that while a relatively high proportion (11%) of journeys within Melton Mowbray are already undertaken by walking, only 2.2% of commuters cycle to work.

Conversely, analysis indicates that over half of local car trips (i.e. journeys which both start and finish their journeys in the town) are shorter than 1.5 miles, well within or close to the maximum distances at which cycling, and walking are viable alternative modes of transport for most people (6 miles and 1 mile respectively). This indicates that there is likely to be substantial untapped potential for increasing levels of walking and cycling if the attractiveness of these modes of travel can be improved.

2.3.33. Currently, there are limited, dedicated routes for walkers and cyclists in the town, with particular issues for pedestrian severance crossing Norman Way, Nottingham Road and Leicester Road junctions. The removal of traffic from the town centre and associated key junctions needing to be traversed represents an important impact of the scheme.

2.3.34. There are several pedestrian pinch points that become particularly apparent on market days. Crossing the A607 at Scalford Road to access the town and the market, and vice versa. There are often more pedestrians than footway space. The second is pedestrians crossing Leicester Street (A606/A607) in the town centre one way system to access the pedestrianised Market Place. There is a pelican crossing; however it is not located where most pedestrians attempt to cross. Pedestrians tend to use Park Lane and Church Street as this provides direct access to the large car park off Burton Road, and keeps them away from the busy, heavily trafficked Burton Street (A606). At the point where many pedestrians attempt to cross, the footway is very narrow on the south side of the road, and it is also where there is a pinch point in the carriageway making it a narrow pass for two cars, which inevitably get very close to the edge of the footway.

2.3.35. There are also issues regarding the crossing of Wilton Road which is significant as it has a sizeable car park and bus drop off location on its west side, but the town centre is on the east side. Crossing points are not ideally located here and a refuge aligned with the entrance to the car park encourages pedestrian crossing across three lanes of traffic.

TRAFFIC ISSUES & CONGESTION

2.3.36. As part of the process of developing the transport strategy for Melton Mowbray, feasibility studies have been undertaken to evaluate the existing and future problems and issues prevailing within the town without any transport intervention, and to consider a range of potential transport measures as the adopted Local Plan has developed.

2.3.37. These studies include:

- Melton Transport Strategy Evidence Base (Stage 1 – Through Traffic Analysis, 2014);
- Melton Transport Strategy Evidence Base (Stage 2 – Non-Through Traffic Analysis, 2014);
- Melton Transport Strategy Evidence Base (Stage 3 – Analysis of Traffic at Points of Interest, 2015);
- Cumulative Development Impacts Assessment (2014); and
- Option Appraisal Report (2016, refreshed in 2017 with the new Leicester and Leicestershire Integrated Transport Model (LLITM) model).

2.3.38. These documents have been used, together with the latest LLITM model, to inform and evidence the current traffic-related problems in Melton Mowbray.

2.3.39. The LLITM has a base year of 2014, using a combination of mobile phone and roadside interview information to support estimates of travel demand in the area.

HIGHLY SIGNIFICANT LEVELS OF CONGESTION

2.3.40. Melton Mowbray experiences congestion at numerous points in the town centre and along key approach routes to the town centre. This is on almost all radials, and at the critical junctions identified in the previous section. The extent of congestion is therefore right across the town and covers all cross-town routes. This represents a key point in terms of the need for intervention.

2.3.41. Further, the congestion experienced in Melton Mowbray is significant. The town has one of the slowest recorded vehicle speeds across the market towns in Leicestershire, with average vehicle speeds of 17.94 mph (LCC Transport Trends Report, 2016).

2.3.42. This congestion arises due to the extent of through traffic, intra-town traffic, and traffic with destinations in Melton Mowbray itself, alongside network capacity that is limited by the number (and historic scale) of cross-town routes, as well as the geographical constraints from the river and rail line that funnel traffic to a limited number of key junctions.

2.3.43. As well as issues at these junctions, the slow speed of traffic through the centre of Melton Mowbray also encourages rat-running, especially through the historic centre, via routes such as Chapel Street and King Street that are not intended for such purposes.

2.3.44. Traffic data for Melton Mowbray, shown in Figure 2-8 to Figure 2-11, reveals the extent of the congestion problem. On these maps, red indicates slow-moving traffic (<10mph) while green indicates smooth traffic flow.

2.3.45. These plots show that traffic congestion is demonstrated on all links approaching the town centre, and across the whole extent of the town centre on a typical AM and PM peak. Vehicle movements are particularly slow on the A606 (north and south of the town), the A607 (east and west of the town) and on the western and southern sides of the town centre.

2.3.46. Figure 2-10 indicates that on market-days there are significant levels of congestion even in the inter-peak, in addition to those experienced in the AM and PM peaks. Vehicle movements are slow in the town centre and on the northern radials across large parts of the day.

2.3.47. Figure 2-11 shows a typical off-peak hour in Melton Mowbray for comparison. The travel speeds are consistently green across the town and town centre in the off-peak; demonstrating that the AM and PM peak patterns, as well as non-traditional peak hours on market days are reflective of the constraint placed on traffic by the town centre network. Many routes show at least a 20mph difference between peak and off-peak speeds.

Figure 2-8 - AM Peak hour Speeds - Melton Mowbray

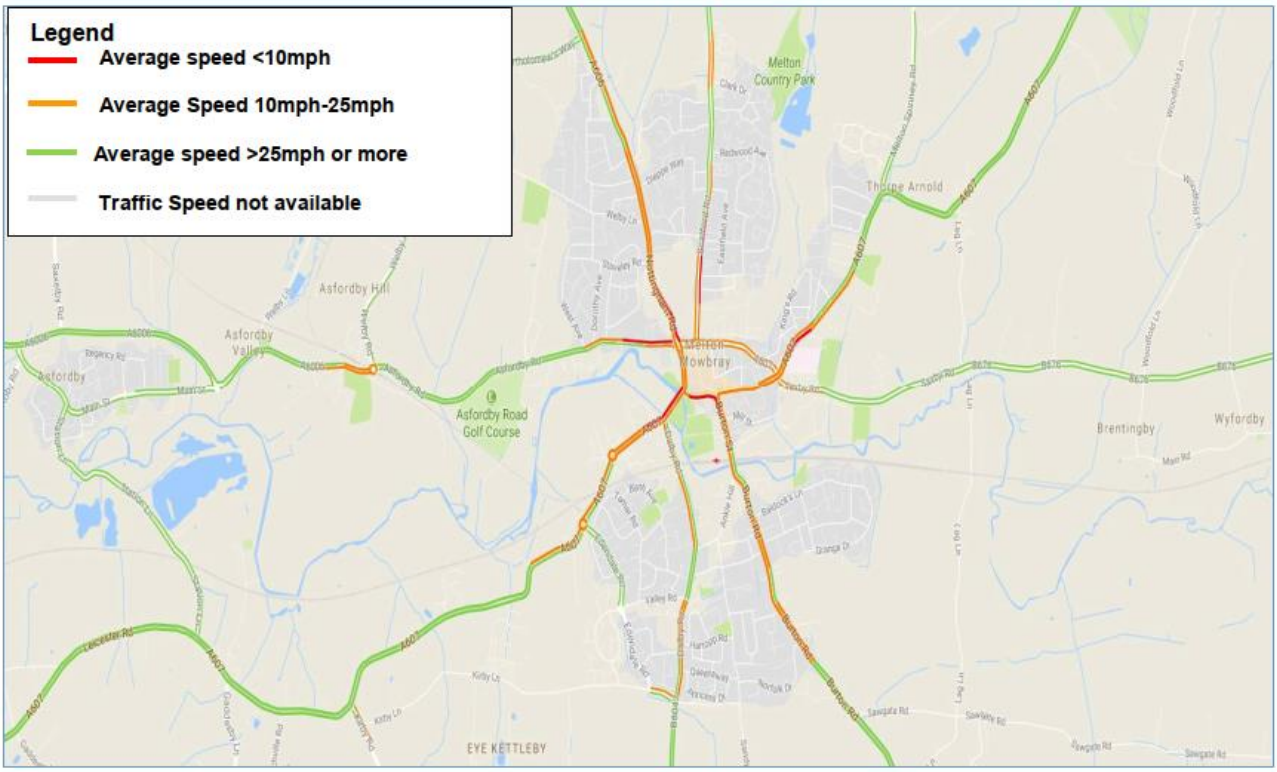


Figure 2-9 - PM Peak hour Speeds- Melton Mowbray

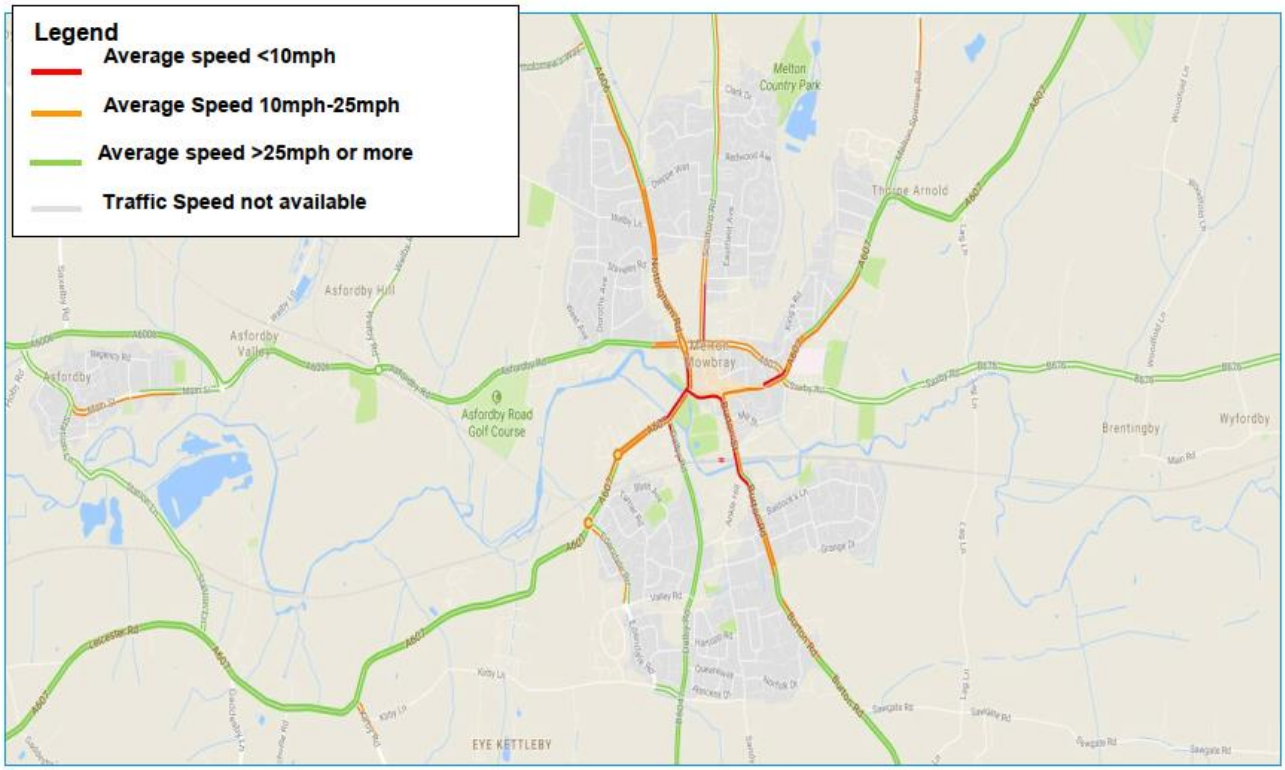


Figure 2-10 - Inter-Peak Hour- Melton Mowbray on Market Days

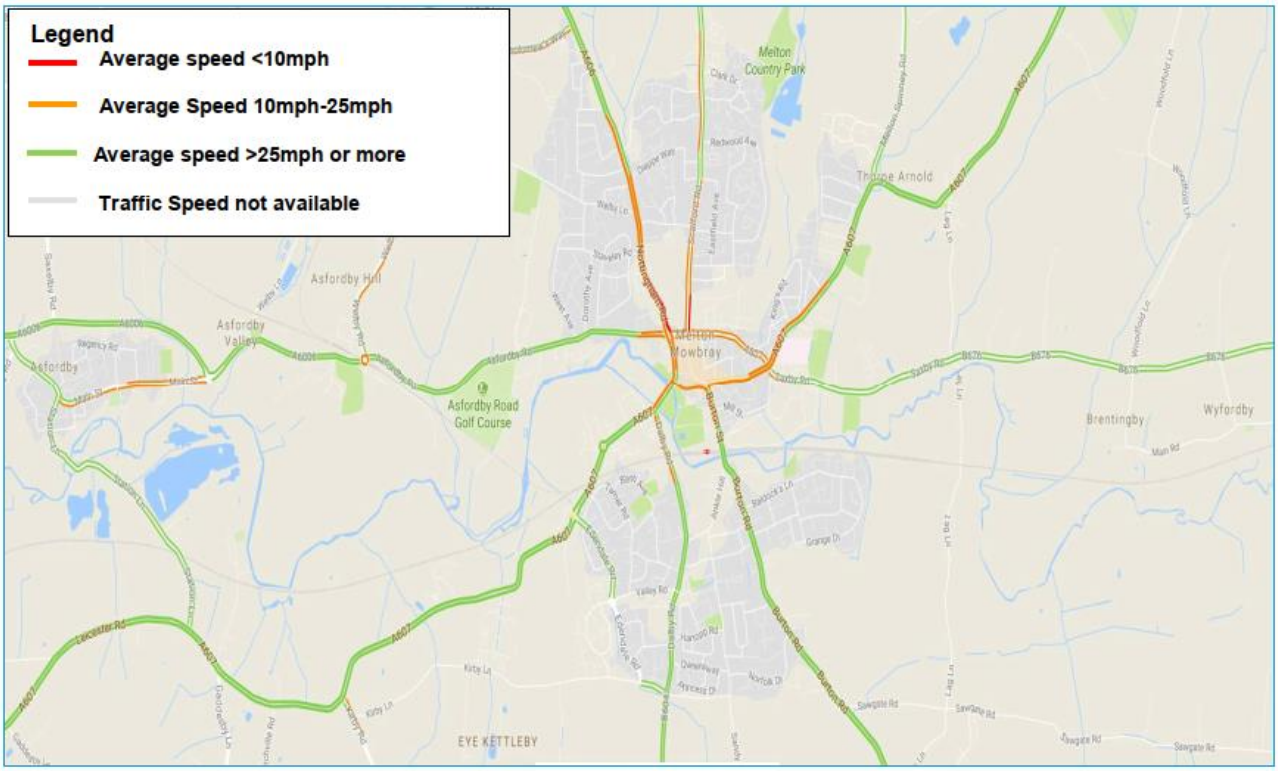
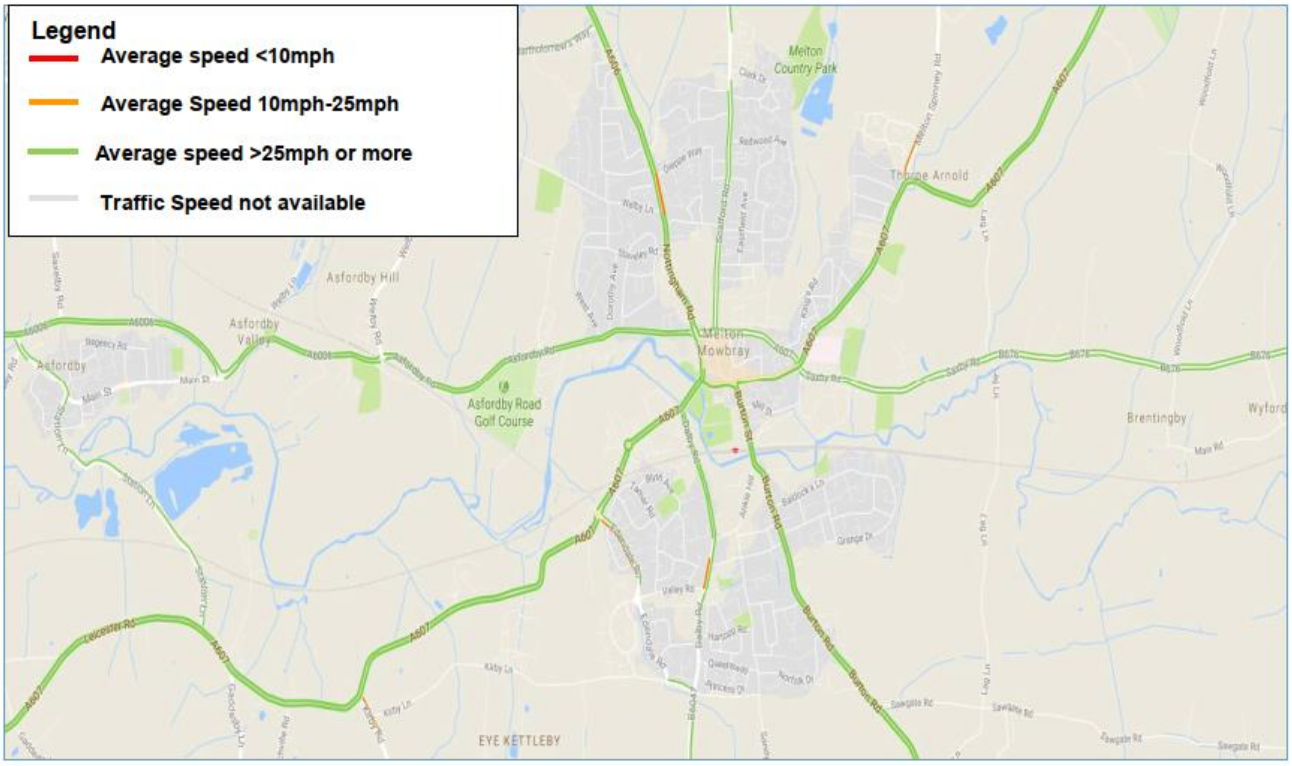


Figure 2-11 - Off-Peak Hour- Melton Mowbray (No delays)



2.3.48. This pattern is created as a function of traffic volumes, through a constrained market town centre. Pre-Covid, traffic volumes had seen significant increases over the last 10-years, with traffic volumes likely to return to such levels in the near future.

2.3.49. To demonstrate this, traffic data on a number of key links into the Melton Mowbray town centre have been obtained from LCC for the years 2008 and 2016, to understand traffic growth in and around Melton town centre.

2.3.50. Traffic counts have been obtained for the following links, shown in Figure 2-12.

2.3.51. Figure 2-12 and a summary of the counts provided in Table 2-2:

- Melton Spinney Road;
- Scalford Road;
- Burton Road;
- Saxby road;
- Dalby Road;
- Leicester Road; and
- Nottingham Road.

Figure 2-12 - Traffic Counts Location

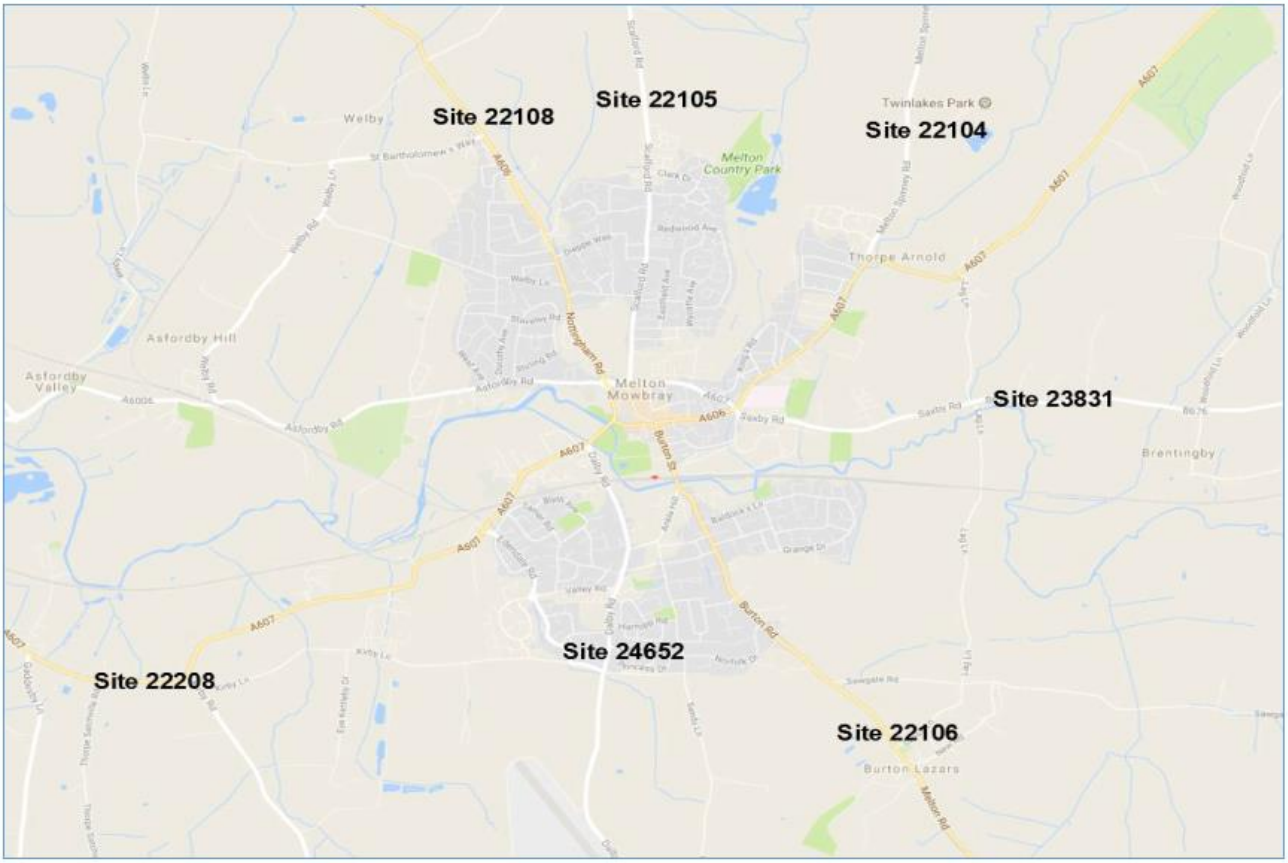


Table 2-2 - 2008 and 2016 Traffic Counts on Key Links (Vehicles)

Site Number	Location		2008			2016			% Growth		
		Direction	AM	PM	24h	AM	PM	24h	AM	PM	24h
22104	Melton Spinney Road, N of Thorpe Arnold	IN	97	99	926	92	134	1088	-5%	35%	17%
22104	Melton Spinney Road, N of Thorpe Arnold	OUT	46	86	948	64	87	1103	39%	1%	16%
22105	Scalford Road, N of Clark Drive	IN	134	123	1393	112	126	1340	-16%	2%	-4%
22105	Scalford Road, N of Clark Drive	OUT	120	120	1321	111	115	1288	-8%	-4%	-2%
22106	Burton Road, Burton Lazars	IN	492	447	5597	443	524	5655	-10%	17%	1%
22106	Burton Road, Burton Lazars	OUT	445	513	5682	512	452	5462	15%	-12%	-4%
23831	Saxby Road, E of Lag Lane	IN	210	165	2087	277	292	3367	32%	77%	61%
23831	Saxby Road, E of Lag Lane	OUT	127	170	1912	187	196	2412	47%	15%	26%
24652	Dalby Road, N of Kirby Lane	IN	217	191	2294	226	238	2478	4%	25%	8%
24652	Dalby Road, N of Kirby Lane	OUT	196	166	2129	195	196	2295	-1%	18%	8%
22208	Leicester Road, E of Kirby Bellars (A607)	IN	692	697	7595	671	695	7700	-3%	0%	1%
22208	Leicester Road, E of Kirby Bellars (A607)	OUT	684	650	7874	594	676	7955	-13%	4%	1%
22108	Nottingham Road, N of St Barts Way	IN	395	412	4597	402	491	4637	2%	19%	1%
22108	Nottingham Road, N of St Barts Way	OUT	344	392	4686	438	385	4706	27%	-2%	0.4%
Total On All Routes		IN	2237	2134	24489	2223	2500	26265	-1%	17%	7.3%
		OUT	1962	2097	24552	2101	2107	25221	7%	0%	2.7%
		Two-Way	4199	4231	49041	4324	4607	51486	3%	9%	5.0%

** No 2016 data, 2015 data used instead*

2.3.52. A comparison of the two sets of counts (i.e. 2008 & 2016) shows that the overall traffic into Melton town centre has shown an increase from 2008 to 2016 of over 5% on a two-way basis; with a 7.3% increase in all-day traffic levels into the town.

2.3.53. The highest percentage increase traffic into the town centre is experienced on Saxby Road, followed by Melton Spinney Road and then Dalby Road.

2.3.54. Importantly, the primary, and already congested routes have the least amount of traffic growth in the AM and PM peaks. These are Burton Road, Leicester Road, Nottingham Road and Scalford Road. Such a pattern is highly demonstrative of significant rat-running through the town given existing peak hour constraints and congestion on main routes to/from and through the town.

2.3.55. Indeed, more detailed analysis of the above table indicates no traffic growth in the AM or PM peak for trips in the direction of most congestion (inbound to Melton in the AM Peak and outbound from Melton in the PM peak), whilst the opposing direction and all-day traffic totals continue to see strong traffic growth.

2.3.56. The above highlights the extent of current congestion issues surrounding the town centre and shows that commuters are generally avoiding the use of these key routes as a result.

2.3.57. Supplementary analysis has been conducted utilising 2022 traffic counts to understand the post-Covid traffic volumes, these are shown in Table 2-3. This data shows a decrease in traffic volumes between 2016 and 2022 on almost all routes into the town, generally between 5 and 10% (with Dalby Road and Saxby Road inbound being notable exceptions). The overall traffic volume is currently over 90% of the 2016 levels, and expected to further increase and return to at, or near, pre-Covid levels.

Table 2-3 - 2016 and 2022 Traffic Counts on Key Links (Vehicles)

Site Number	Location	Direction	2016	2022	% Growth
			24h	24h	24h
22104	**Melton Spinney Road, N *of* Thorpe Arnold**	IN	1088	1035	-5%
22104	**Melton Spinney Road, N *of* Thorpe Arnold**	OUT	1103	1001	-9%
22105	**Scalford Road, N of Clark Drive**	IN	1340	1096	-18%
22105	**Scalford Road, N of Clark Drive**	OUT	1288	1029	-20%
22106	**Burton Road, Burton Lazars**	IN	5655	5093	-10%
22106	**Burton Road, Burton Lazars**	OUT	5462	4685	-14%
23831	**Saxby Road, E of Lag Lane**	IN	3367	2354	-30%
23831	**Saxby Road, E of Lag Lane**	OUT	2412	2252	-7%
24652	**Dalby Road, N of Kirby Lane**	IN	2478	2643	7%
24652	**Dalby Road, N of Kirby Lane**	OUT	2295	2403	5%
22208	**Leicester Road, E of Kirby Bellars (A607)**	IN	7700	7119	-8%
22201	**Leicester Road, E of Kirby Bellars (A607)**	OUT	7955	7301	-8%
22108	**Nottingham Road, N of St Barts Way**	IN	4637	4447	-4%
22108	**Nottingham Road, N of St Barts Way**	OUT	4706	4528	-4%
Total On All Routes		IN	26265	23787	-9%
		OUT	25221	23199	-8%
		Two-Way	51486	46986	-9%

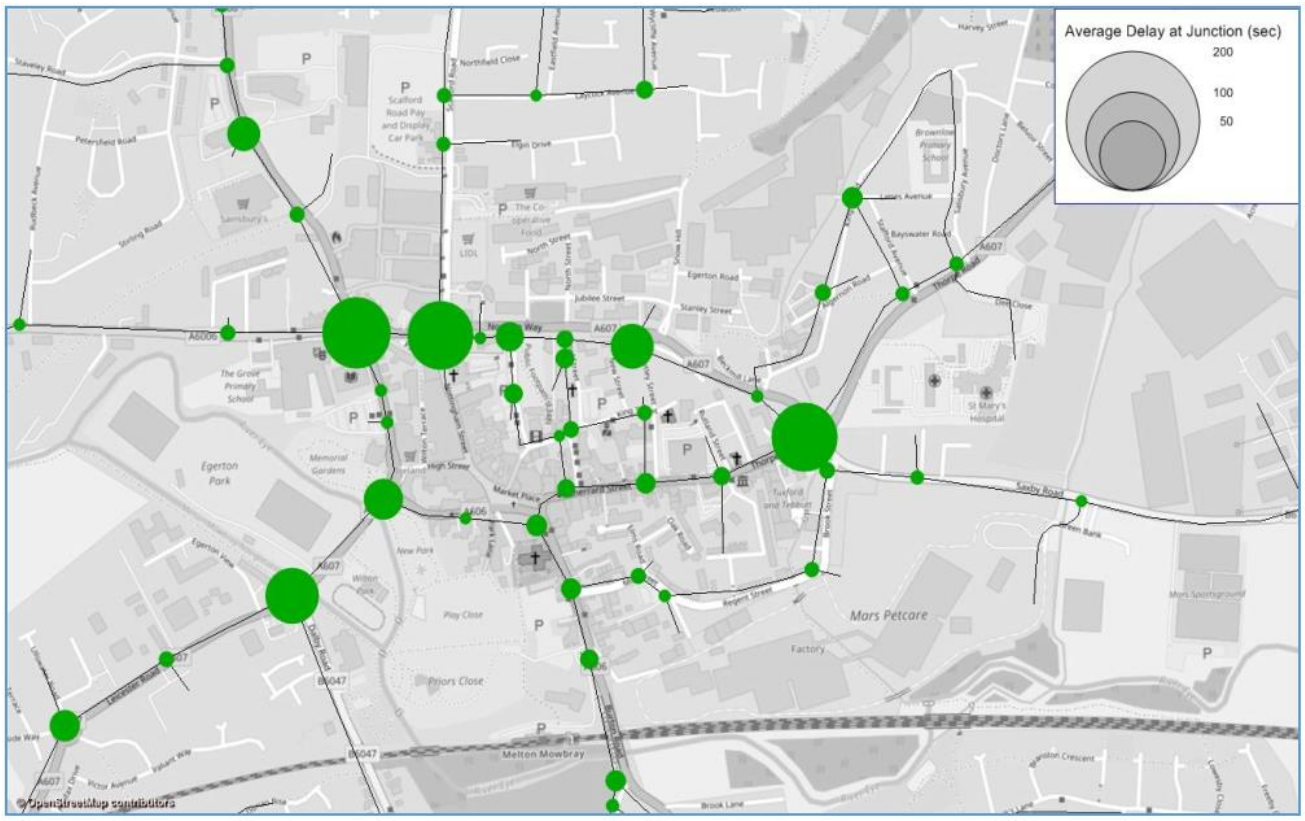
TOWN CENTRE JUNCTION DELAYS

2.3.58. The volume of through traffic passing through Melton Mowbray town centre results not only in congestion on links but also significant delays at several junctions.

2.3.59. There are two peak traffic movements: one related to school traffic, within and across the town; and another, in the more traditional peak hours, related to commuting and through traffic in the town.

2.3.60. Figure 2-13 from the LLITM SATURN model shows the average level of delay at pinch points in the town centre in the AM peak in the 2014 base year.

Figure 2-13 - Node delays in the AM Peak in Melton Mowbray Town Centre in 2014



2.3.61. It should be noted that these are presented as demand weighted averages of the turning movements, rather than maximum delays observed for any turning movement, as well as being an average across the peak hours, in a neutral month.

2.3.62. The analysis therefore tends to underestimate peak hour congestion but serves to highlight the capacity related delays at a number of key junctions in and around the town centre.

2.3.63. As an average across all turning movements, the A607/ Nottingham Road junction, Scalford Road, and Thorpe End junctions all experience 1.5 minutes average delay; with right and straight-ahead movements at these junctions higher than this average.

2.3.64. Other junctions typically experience between 30 seconds to 1 minute of delay, as an average across all turning movements.

2.3.65. Importantly, it should also be noted that many vehicles have to pass through several of these junctions to reach, or cross, the town centre, so the overall level of delay for through journeys extends significantly beyond these levels.

2.3.66. For example, traffic crossing the town centre east-west or north-south would encounter three or four of the main pinch points and delay locations respectively, resulting in a typical (neutral day) delay of 4-5 minutes in total on this part of the journey. In some cases, this can increase to 10 minutes during the peak.

2.3.67. To give these values some context, the centre of Melton Mowbray is little more than 500m across.

2.3.68. Alongside the scale of delay, this also creates network resilience issues; with limited route choice, and no alternatives across the town centre that don't already experience delay themselves.

2.3.69. To highlight this, journey time survey data carried out in 2014 on key routes across Melton Mowbray town centre has been obtained from LCC and reviewed to understand the level of delays and speeds currently experienced in and around the Melton Mowbray town centre.

2.3.70. The key routes for which journey time data has been obtained are shown in Figure 2-14 and a summary of the data in terms of journey time, average speed and delays provided in Table 2-4.

Figure 2-14 - Melton Mowbray Town Centre – Journey Time Survey Routes in 2014

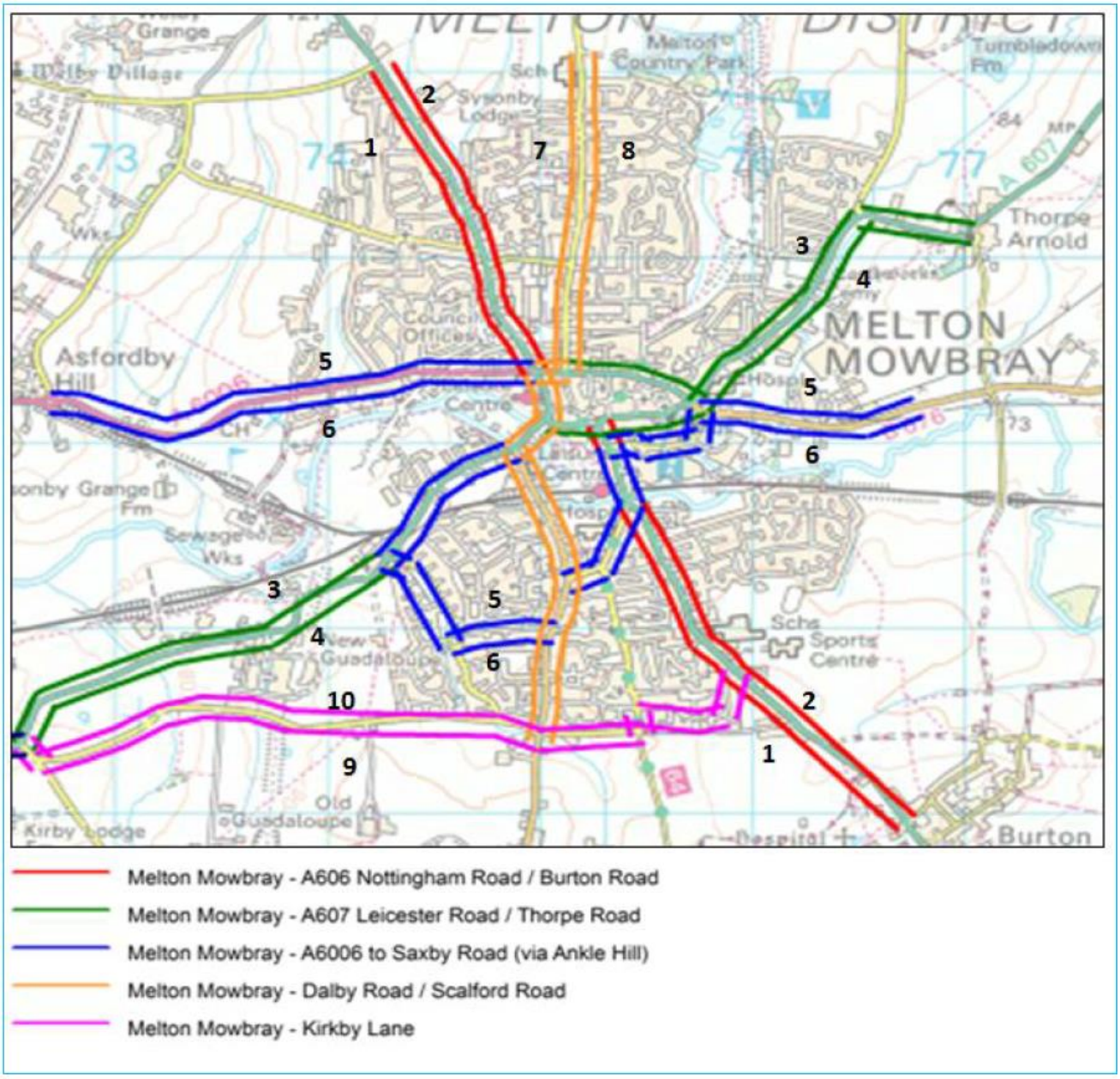


Table 2-4 - Travel Speed and Delays in Melton Town Centre in 2014

Time Period	Route No.	Distance (miles)	Total Journey Time (seconds)	Average Speed (miles per hour)	Average Speed Town Centre (miles per hour)	Lowest Speed (miles per hour)	Lowest Speed Town Centre (miles per hour)	Total Delay (seconds)
AM	1	3.17	549.48	20.76	14.36	4.02	4.02	142.05
	2	3.62	742.48	19.41	13.77	4.10	4.10	270.22
	3	3.77	637.36	22.07	14.59	4.02	4.02	221.28
	4	3.59	577.00	22.48	13.67	6.90	6.90	176.74
	5	4.61	845.55	20.01	11.07	5.82	5.82	216.70
	6	4.61	802.89	20.69	16.25	4.02	4.02	174.03
	7	2.42	515.86	20.71	16.96	4.02	4.02	195.00
	8	2.42	519.38	20.44	12.47	1.88	1.88	198.58
	9	7.64	333.10	25.15	N/A	13.48	N/A	19.18
	10	7.64	336.34	24.46	N/A	14.05	N/A	22.41
PM	1	3.17	572.32	20.22	14.13	3.52	3.52	164.88
	2	3.62	726.34	19.37	13.50	4.90	4.90	254.06
	3	3.77	669.74	21.70	14.15	3.52	3.52	253.65
	4	3.59	570.00	22.56	13.45	5.81	5.81	169.73
	5	4.61	847.59	20.06	11.00	5.45	5.45	218.73
	6	4.61	820.23	20.59	15.97	3.52	3.52	191.37
	7	2.42	535.15	20.43	16.47	3.52	3.52	214.32
	8	2.42	516.71	20.30	12.36	2.74	2.74	195.88
	9	7.64	332.57	25.15	N/A	13.47	N/A	18.64
	10	7.64	336.26	24.46	N/A	14.06	N/A	22.35

2.3.71. As show in Table 2-4 travel speeds along these key routes typically average between 20mph to 25mph along the whole route; however, the town centre is notably slower on average at 11-16mph, across most routes.

2.3.72. The lowest speeds are very low for most routes, ranging from 1.8mph to 4mph and occur in the town centre.

2.3.73. Total delays along all these routes except Kirby Lane (Route 9 and 10 that does not pass through the town centre) range from 2 minutes to 4.5 minutes across the town centre, on average.

2.3.74. The highest delays are experienced along the A606 Nottingham Road / Burton Road, followed by the A607 Leicester Road / Thorpe Road, and then Scalford Road.

2.3.75. It should be noted that the above represents typical average hour delays; peaks within the peak hour, typically around 08:30 and 17:00 are greater than those above.

HIGH LEVELS OF THROUGH TRAFFIC

2.3.76. Analysis as part of the LLITM 2014 base model and the Melton Mowbray Interim Transport Strategy shows that through traffic, via Melton Mowbray town centre, is one of the main contributors to heavy congestion during the peak times, with through traffic accounting for 20% of all vehicles.

2.3.77. To highlight the levels and patterns of current through traffic in the town, sector-to-sector trip analyses were undertaken using 2014 base year traffic data.

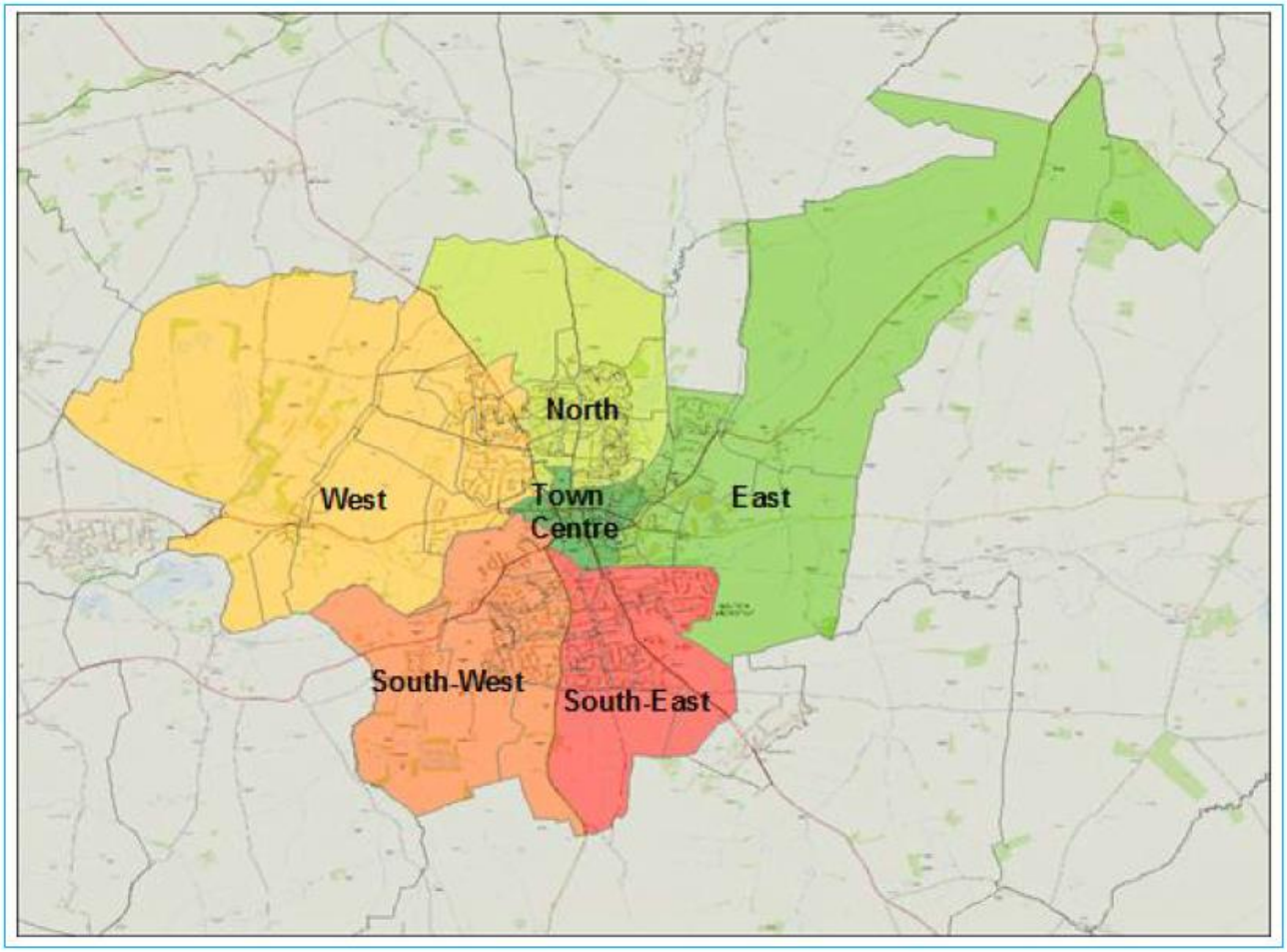
2.3.78. Table 2-5 provides a list of the internal and external sector zones considered in the analysis, and Figure 2-15 shows the location of internal sector zones within Melton.

Table 2-5 - Internal and External Sector References

Sector	Description	Location
1	Town Centre	Internal
2	East	Internal
3	North	Internal
4	West	Internal

5	South-West	Internal
6	South-East	Internal
11	A606_NottinghamRd	External
12	ScalfordRd	External
13	MeltonSpinneyRd	External
14	A607_ThorpeRd	External
15	B676_SaxbyRd	External
16	A606_BurtonRd	External

Figure 2-15 - Internal Sector Locations



2.3.79. The total overall (12 hour) traffic volumes for all movements (i.e. internal, internal-external and external and external) and just the through traffic (i.e. external-external) by route through Melton Mowbray town centre are shown in Table 2-6 and Table 2-7 respectively.

Table 2-6 - 2014 All Movement Traffic Flow – All Vehicles

2014_base	Town Centre	East	North	West	South-West	South-East	A606_NottinghamRd	ScalfordRd	MeltonSpinneyRd	A607_ThorpeRd	B676_SaxbyRd	A606_BurtonRd	DalbyRd	KirbyRd	A607_LeicesterRd	A6006_AsfordbyRd	Total	Percentage of Traffic on Road associated with Through Traffic
Town Centre	2235	1610	1749	763	1689	2074	563	101	77	682	215	585	194	0	736	847	14121	
East	1640	1400	1116	231	767	1102	221	1	484	739	380	329	145	0	564	434	9552	
North	1653	1078	1284	655	1406	1418	1120	582	8	79	207	398	144	0	416	298	10747	
West	824	309	614	1092	676	187	760	112	3	855	135	362	95	0	50	2010	7313	
South-West	1659	732	1406	541	1768	753	184	113	30	276	75	480	205	134	2434	40	10831	
South-East	1446	866	1277	144	548	999	178	0	58	335	86	675	198	0	598	257	7667	
A606_NottinghamRd	668	251	1059	669	143	166	0	0	0	4	77	885	56	0	2	8	3988	**25.9%**
ScalfordRd	136	9	490	78	43	15	0	0	0	0	0	80	0	0	0	9	861	**10.4%**
MeltonSpinneyRd	113	9	490	78	43	15	0	0	0	5	1	114	31	0	16	2	916	**18.6%**
A607_ThorpeRd	784	727	52	63	278	375	3	0	6	0	1	19	151	0	246	79	2749	**18.4%**
B676_SaxbyRd	321	573	181	49	85	86	23	0	1	1	0	0	5	0	328	106	1758	**26.4%**
A606_BurtonRd	571	321	434	357	479	617	1304	0	29	19	0	0	54	0	977	237	5400	**48.5%**
DalbyRd	206	178	113	79	244	263	63	0	25	133	5	72	0	0	6	18	1405	**23.0%**
KirbyRd	37	0	31	19	134	0	0	0	0	0	0	0	0	0	202	0	423	-
A607_LeicesterRd	884	520	490	85	2283	602	5	16	3	216	225	840	7	237	0	1	6412	**24.2%**
A6006_AsfordbyRd	113	581	359	1884	25	48	9	16	2	119	147	187	22	0	1	0	4532	**11.1%**
Total	14275	9604	10660	6711	10645	8802	4434	942	726	2693	1553	5026	1308	371	6578	4348	88675	
Percentage of Traffic on Road associated with Through Traffic							**31.8%**	**3.5%**	**9.0%**	**18.4%**	**29.3%**	**43.7%**	**24.3%**	-	**27.0%**	**10.6%**	**32.1%**	

Table 2-7 - 2014 External to External Traffic Flow – All Vehicles

2014_base	A606_NottinghamRd	ScalfordRd	MeltonSpinneyRd	A607_ThorpeRd	B676_SaxbyRd	A606_BurtonRd	DalbyRd	KirbyRd	A607_LeicesterRd	A6006_AsfordbyRd	**Total**
A606_NottinghamRd	0	0	0	4	77	885	56	0	2	8	**1033**
ScalfordRd	0	0	0	0	0	80	0	0	0	9	**90**
MeltonSpinneyRd	0	0	0	5	1	114	31	0	16	2	**170**
A607_ThorpeRd	3	0	6	0	1	19	151	0	246	79	**505**
B676_SaxbyRd	23	0	1	1	0	0	5	0	328	106	**465**
A606_BurtonRd	1301	0	29	19	0	0	54	0	977	237	**2620**
DalbyRd	63	0	25	133	5	72	0	0	6	18	**323**
KirbyRd	0	0	0	0	0	0	0	0	202	0	**203**
A607_LeicesterRd	5	16	3	216	225	840	7	237	0	1	**1549**
A6006_AsfordbyRd	9	16	2	119	147	187	22	0	1	0	**501**
Total	**1408**	**33**	**66**	**497**	**456**	**2196**	**326**	**237**	**1779**	**461**	**7458**

2.3.80. Analysis of the LLITM 2014 base model shows that there are approximately 7,500 through traffic movements (7am-7pm) per day across all routes.

2.3.81. When looking at the breakdown by route, the largest concentration of through traffic movement is along the A606 axis, constituting more than 40% of total traffic on that route.

2.3.82. The percentage of through traffic in the east-west direction is also high, at 25 to 30% of traffic on these routes, with similar through traffic percentages also observed on Dalby Road and Melton Spinney Road.

2.3.83. Importantly, Table 2-6 and Table 2-7 show that:

- Whilst most traffic to/from the town has origins and destinations in the town centre, there is a significant amount of through traffic in Melton Mowbray;
- This varies by route, but is highest for the A606 Burton Road, followed by the A606 Nottingham Road. The A607 Leicester Road and Saxby Road have the next highest percentages;
- Internal through traffic within the town is also apparent, with the north and south of Melton Mowbray creating the most traffic demands (origin and destination);
- The A607 Leicester Road is the highest trafficked road, but most demand is to/from south-west Melton Mowbray and the town centre to Leicester, and that does not pass through the town; and
- East-west movements internally across Melton Mowbray are typically lower than those north-south and that north-south represents the greater total traffic volume.

2.3.84. However, it is important to note that being able to cater for east-west movements is important from a network resilience point of view. Melton Mowbray is not a main through-route for freight between the M1 (including East Midlands Airport) and the A1 (onto ports such as Felixstowe) but is an alternative freight route for such movements during periods of network disruption; as well as being a key freight trip generator and attractor in its own right.

2.3.85. Total through traffic volumes on all routes are shown graphically in Figure 2-16 for the 2014 Base AM Peak and Figure 2-17 for the 2014 Base PM Peak.

2.3.86. Figure 2-16 to Figure 2-17 also show the use of Church Street and King Street as a rat-run through the town centre, as well as Dalby Road and minor routes such as Ankle Hill to the south of the town centre to avoid the key, capacity constrained junctions.

Figure 2-16 - Through Traffic in the AM Peak in 2014 (All vehicles)

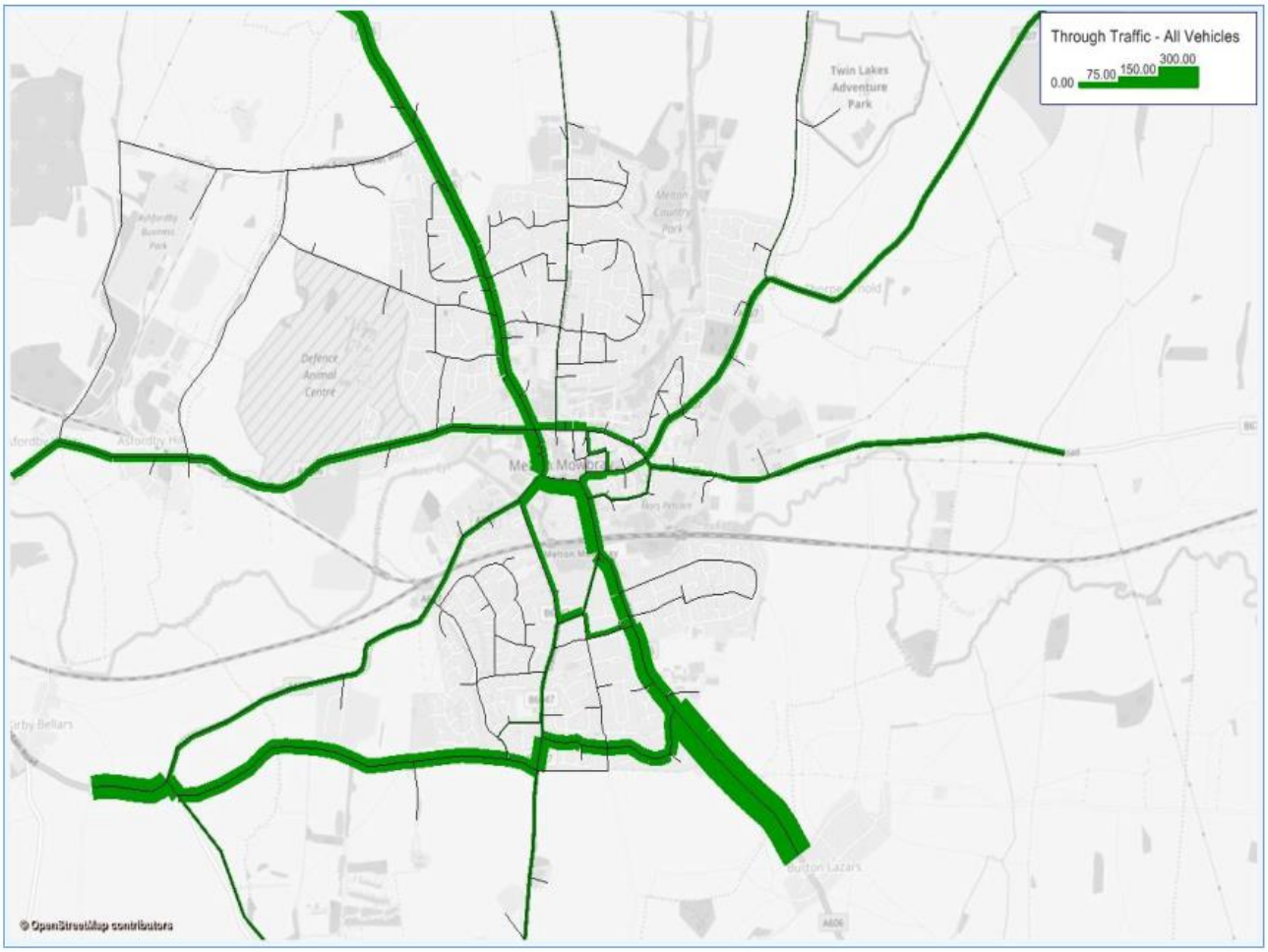
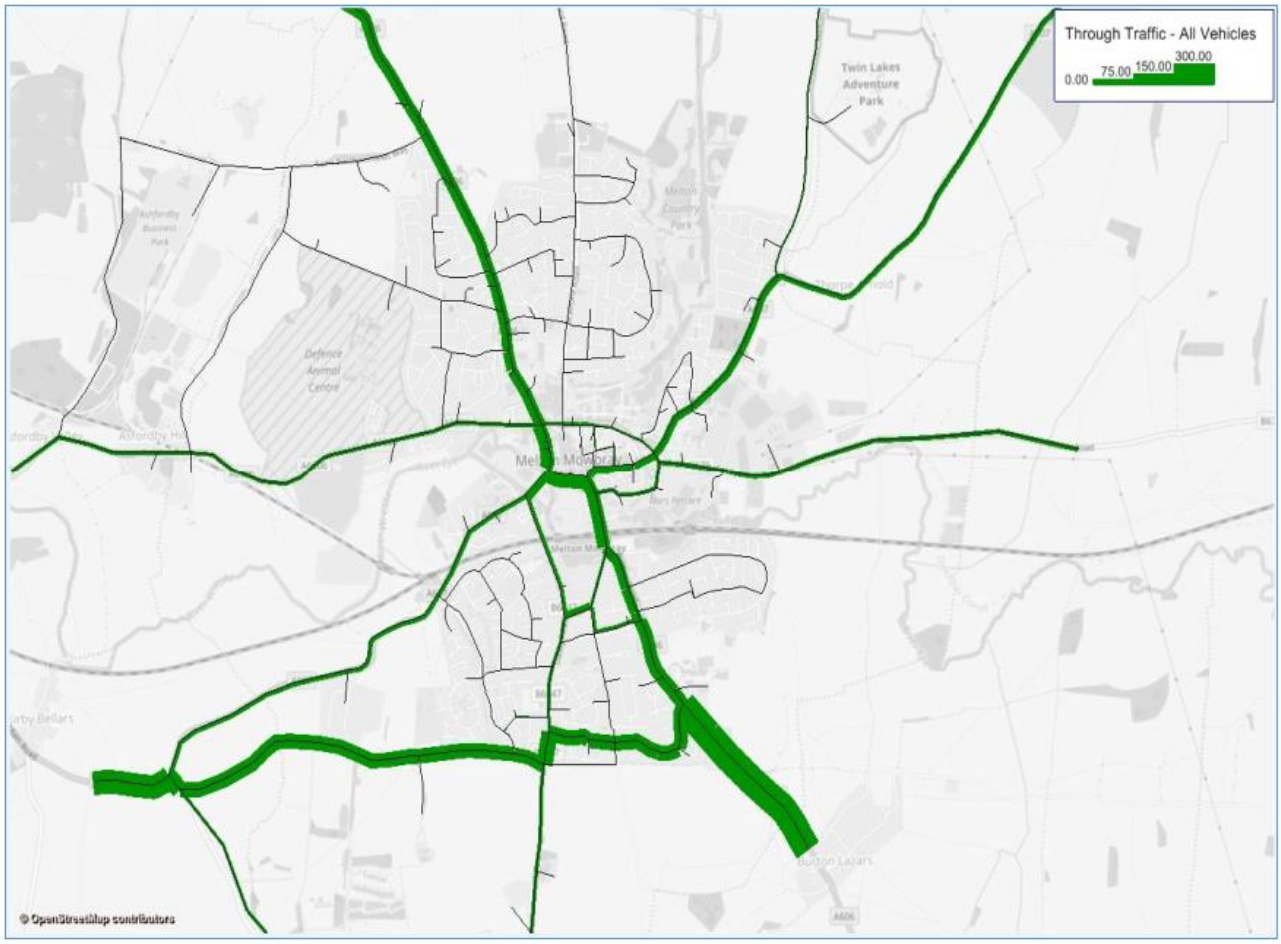


Figure 2-17 - Through Traffic in the PM Peak in 2014 (All vehicles)



HGV MOVEMENTS THROUGH THE TOWN CENTRE

2.3.87. The centre of Melton Mowbray faces two traffic problems related to Heavy Goods Vehicle (HGV) and Light Goods Vehicle (LGV) movements.

2.3.88. First, the industrial area to the east of the town centre generates a significant number of HGV and LGV movements, many of which use the town centre to access or egress manufacturing premises (particularly for the industrial estate in the east of the town).

2.3.89. Secondly, there are a significant number of through HGV and LGV movements, with non-Melton Mowbray destinations. Both types of HGV and LGV movement create problems in the town centre, including safety, noise and air quality problems.

2.3.90. The 2017 Options Assessment Report (Appendix A) provides a full breakdown of through traffic movements by route, disaggregating the total above into LGV and HGV movements.

2.3.91. The analysis shows that LGV and HGVs both have typically higher proportions of through movement than cars. LGV proportions vary between routes, but through traffic proportions are typically between 25 and 70%; and are generally highest on the main A road routes.

2.3.92. The highest values are noted on the A606 Burton Road (73%) followed by the A606 Nottingham Road (60%). Leicester Road (A607) whilst having the highest total number of LGV movements, has a relatively low proportion of through traffic movements. This is because it is the main route between

Leicester and the employment area to the southwest of Melton, which the majority of trips using Leicester Road have destinations. Importantly, therefore they do not cross through the town.

2.3.93. The same pattern is noted in terms of HGV movements. Most HGV movements are generated or attracted to and from the southwest and eastern parts of Melton Mowbray, where most existing employment and manufacturing activities are located. However, given Melton's position on several major A roads, and a wide range of manufacturing, supplier and agricultural destinations around the town and in the rest of the Borough, overall HGV through traffic proportions are higher still. Typically the proportion of HGV through traffic ranges between 50-90%, with the highest proportions generally to the east, north and northwest of the town.

2.3.94. HGV and LGV through traffic volumes are forecast to increase significantly and will be a major component of the overall projected growth in through traffic. This is especially given Melton Mowbray's growth as a designated Food Enterprise location, and as a result of the significant expansion proposed in the adopted Local Plan given the current capacity constraint to expansion of the town's key businesses associated with current sites.

2.3.95. This will increase the contribution that HGVs and LGVs make to congestion, and associated issues with HGVs and LGVs in the town centre without improvement.

ENVIRONMENTAL ISSUES

HERITAGE

2.3.96. Melton Borough has a rich and varied heritage with many historic buildings and designated conservation areas, most of which are located within Melton Mowbray town centre or along the town's key radial corridors. This coincides with high volume traffic routes, some of which also have a significant proportion of HGVs and LGVs.

2.3.97. This poses threats to the future preservation and enjoyment of the town's key assets and could similarly inhibit the ability to enhance the town centre public realm as part of any proposed regeneration.

AIR QUALITY

2.3.98. Although there are currently no significant air pollution issues across Melton Mowbray, as demonstrated by the lack of any Air Quality Management Areas (AQMA) declared within the town, traffic congestion does cause pockets of poor air quality and high levels of pollution. These include areas in and around Melton Mowbray's critical town centre junctions.

2.3.99. Some of these areas also have substantial residential frontage, which poses a risk to the residents as well as potentially affecting their quality of living. Amongst the most notorious examples is the Mill Street/Regent Street/Brook Street route immediately to the south of the town centre, which many vehicles use to avoid the central ring road due to congestion and partial one-way system.

CLIMATE EMERGENCY

2.3.100. Leicestershire County Council declared a climate emergency in May 2019, reflecting the increasing urgency across the UK to reduce and ultimately eliminate greenhouse gas emissions as well as limiting global warming.

2.3.101. The County Council's declaration commits to working with others and lobbying Government to take the measures required to achieve this within Leicestershire as well as making the County Council's

own operations carbon neutral by 2030. Additionally, the County Council has an Environment Strategy (2018-2030) which sets out how the activities of the Council impact on the environment and the rationale for taking action to address both this and wider environmental issues affecting the County and its population.

2.3.102. A Carbon Management Plan (CMP) has been developed for the NEMMDR, with an aim to effectively manage carbon throughout the project lifecycle by encouraging early consideration of associated carbon emissions and creating associated governance structures and processes. This is discussed further in Section 6.9, with the full CMP found in Appendix B163.

SOCIO-ECONOMIC ISSUES

2.3.103. Melton Borough has a total population of over 50,300, which has grown by 5.3% since 2001. The continuation of growth in population will lead to increased demand for travel in the study area. The Borough can be categorised has having an aging population. There are a lower number of under 16's and people aged between 15 and 44 residing in the Borough by comparison to the rest of Leicestershire and the rest of the country.

2.3.104. Melton Mowbray is the main service and employment centre within the Borough, with a significant number of jobs in the manufacturing sector (mainly food and drink), with many of the jobs provided by a few large manufacturers within Melton Mowbray. Employees are therefore more likely to travel into the town to reach employment opportunities, the majority of whom are dependent on using the private vehicle.

2.3.105. While the Borough currently has very low levels of unemployment, it is characterised by high levels of low paid/low skilled employment, especially within Melton Mowbray itself. This is attributed to the presence of several large manufacturers, particularly in food related businesses, and a reliance on agriculture. This gap in skills reflects the relatively low skilled jobs that are available in the town (Local Futures Profile, 2013) and represents a significant challenge for the economy, particularly in providing a labour force to the service industry.

2.3.106. Melton Mowbray's town centre has a varied range of commercial activity such as banks, solicitors and estate agents, but also a high proportion of independent retailers, particularly independent food shops for which tourism is a vital source of income.

2.3.107. Tourism is a key contributor to the economy of Melton Borough via direct spending and in creating jobs. In 2015, £85.4 million was generated within the local economy through visitor and tourism business expenditure which helps support around 1,200 full-time equivalent jobs[3]. Tourism in Melton Borough is centred on the character of Melton Mowbray as an attractive market town, its food heritage, the wider quality of the rural landscape and heritage assets.

[3] STEAM Tourism Economic Impacts 2014-15 Review, Melton Borough Council

2.4 IMPACT OF NOT CHANGING

2.4.1. Without the scheme, the problems and issues identified in Melton Mowbray in the above section will continue and potentially worsen.

2.4.2. This means that roads will remain congested, with some of the highest levels of delay per mile in the County, impacting on both local residents and those from a wider catchment seeking to make longer distance movements to/from Leicester, Nottingham, Loughborough, the M1 or A1.

2.4.3. Considering the existing traffic conditions within the town, potential future improvements to public transport, to improve ridership, will be difficult to bring into practice, alongside the further housing delivery and economic expansion of the town proposed in the adopted Local Plan.

PLANNED DEVELOPMENT

2.4.4. As noted in the Leicester and Leicestershire Strategic Economic Plan (SEP), Melton Mowbray is a thriving market-town, with a strong housing market and industrial base, offering significant local employment opportunities. Unemployment is exceptionally low against UK averages, at less than 1%.

2.4.5. The town is the main economic centre for the Borough of Melton, providing a base for the larger employers and functioning as the key retail, leisure and service destination for the residents of the Borough.

2.4.6. Melton Mowbray is one of the key places to contribute to the wider economy of the County and the Country. As mentioned, it is nationally recognized as the “Rural Capital of Food” and the only place in Leicestershire to pioneer a Food Enterprise Centre, as detailed in the SEP.

2.4.7. The SEP notes that ‘the Food Enterprise Centre has the potential to improve the performance of 40 businesses, create or attract 37 new businesses to the region, and support 55 graduates into SMEs and rural land management businesses.’ In addition, the market alone already attracts 167,000 visitors annually, with average spend of £30 per visitor and a gross spend estimated at £5.3m per annum.

2.4.8. Doing nothing will lead to the above problems and issues, slowing (and potentially curtailing) the significant levels of economic growth, job creation and housing delivery proposed as part of the adopted Local Plan; itself delivering 6,125 dwellings and over 31ha of employment land being made available for expansion (creating over 3,400 jobs).

2.4.9. The economic mechanisms that will be specifically enabled by the NEMMDR to deliver this growth, for both housing and employment, are detailed in the next two sections. This is also linked to the effective monitoring and benefits realisation management that LCC will be undertaking in relation to these key objectives, as discussed in the Management Case (Chapter 6).

HOUSING DELIVERY

2.4.10. A major constraint imposed by the existing transport system is the limitation to grow the town’s economy and labour market catchment through delivery of housing and employment sites, and to attract further employment investments. An efficient, strategic transport solution is therefore the key to enable the town to deliver its development plan proposals; to solve local housing needs, those required to sustain local jobs growth, and support a national policy issue. Importantly, and demonstrative of Melton Mowbray’s current vitality and demand for housing, over 2,500 of the 6,125 dwellings associated with the adopted Local Plan are already being actively put forward by developers through the planning process; and that makes the time for investment now.

2.4.11. This is not just to accelerate planned housing delivery, but also to accelerate the timings of further applications, as well as being able to act at the most opportune time to co-ordinate plans with the private sector (and secure private sector contributions) to reduce costs to the taxpayer and make the adopted Local Plan ambitions a reality.

2.4.12. Key evidence to support NEMMDR plans are provided by the developers, including those of the Northern consortium and Southern Developers in the Letters of Support, which can be found in Appendix C.

2.4.13. Further to developer commitment, it is important to note the role and function of the NEMMDR scheme in the acceleration of housing delivery plans for the town. Melton Mowbray has a significant amount of overall growth identified in the adopted Local Plan and it is recognised that this growth needs to be supported by infrastructure investment, specifically the NEMMDR that is referenced as a key infrastructure scheme in the adopted Local Plan and enabling a longer-term acceleration of housing delivery in the town.

2.4.14. This is shown from the adopted Local Plan delivery trajectory as detailed in Figure 2-18. It is important to note that this profile is itself derived from known approvals, planning applications made and developer returns regarding their own profiles of expected housing delivery as part of the adopted Local Plan.

2.4.15. Figure 2-18 highlights the significant growth in housing delivery already starting to happen in Melton Mowbray, through approved and submitted planning applications already underway in the town and surrounding Service Centres, prior to the delivery of the NEMMDR in 2025.

2.4.16. Equally importantly, the Northern and Southern Sustainable Neighbourhoods then ramp-up in terms of delivery from this point onwards; delivering a long term rate of growth double that of historic averages.

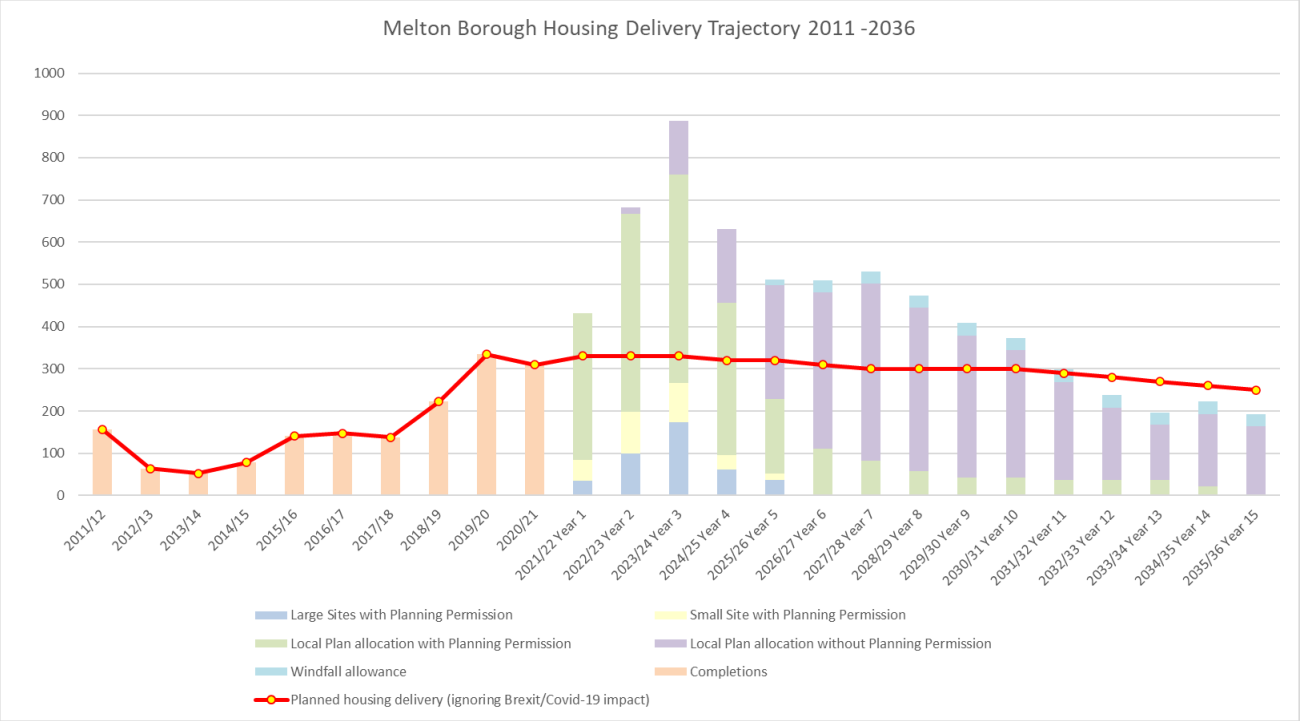
2.4.17. The NEMMDR scheme supports this acceleration by providing the northern section of the route earlier, by 2025, rather than on a gradual and more piecemeal basis, otherwise funded and delivered by the developers through housing sales receipts.

2.4.18. This 15-year acceleration of the northern link, provided for by the NEMMDR allows easier and multiple access to land parcels associated with the Northern Sustainable Neighbourhood in particular, and that is the transport-led mechanism for enabling and sustaining an accelerated development profile from 2025 onwards.

2.4.19. It will also mean earlier transport benefits for residents and transport users in the area.

2.4.20. The development of the Southern Sustainable Neighbourhood will also include the delivery of the Southern Link which is being developed under the Housing Infrastructure Fund (HIF), sponsored by Homes England and will connect with the NEMMDR at the A606, and provide further transport benefits.

Figure 2-18 - Melton Mowbray Housing Delivery Trajectory



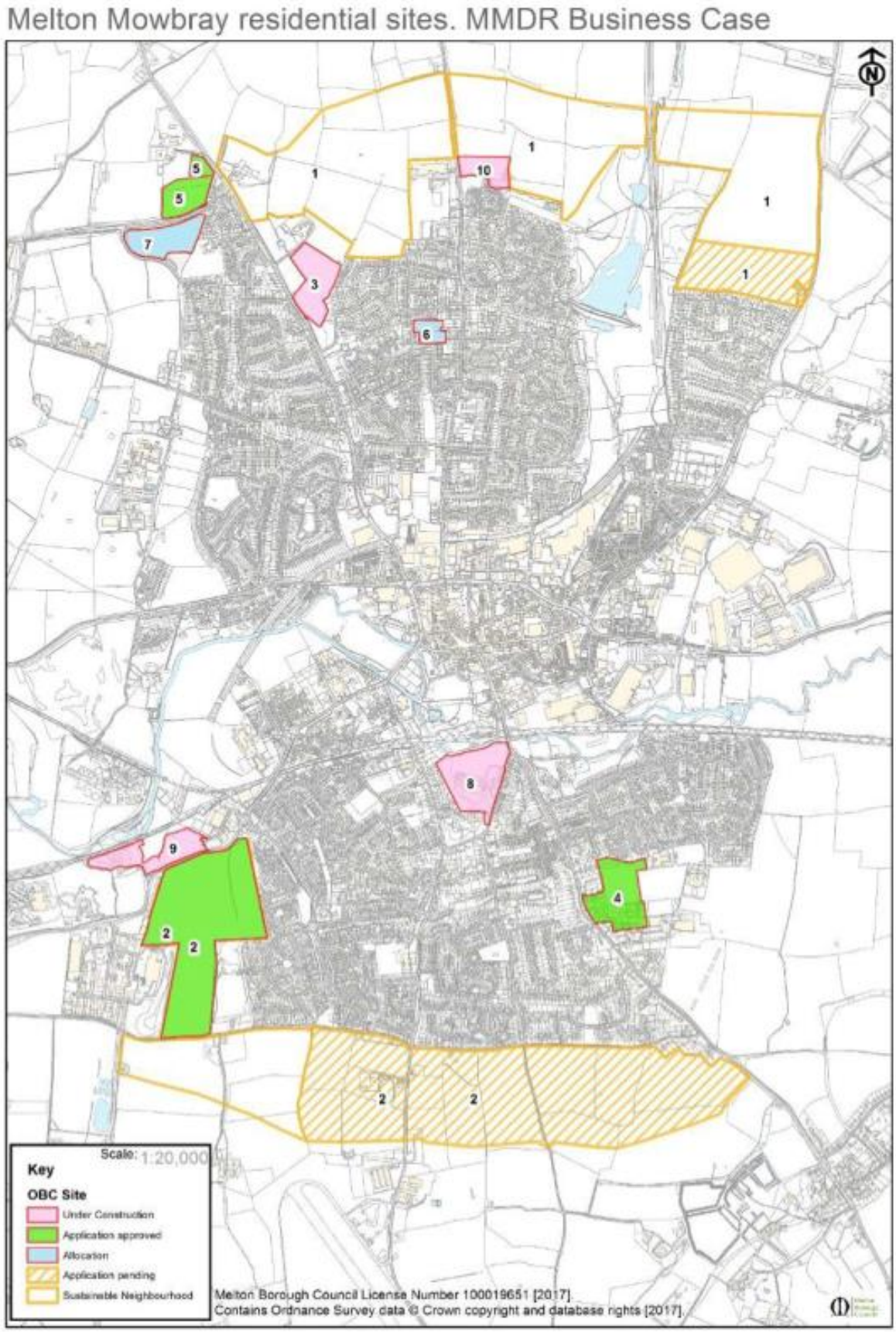
2.4.21. Table 2-8 and the supporting map following the table provides an overview of the key housing developments within Melton Mowbray, along with their planning status and associated timescales for development.

Table 2-8 - Melton Mowbray Distributor Road – Key Housing Growth Sites

Input	Timescale	Description Central Assumption (dwellings)	Comments
Melton North Sustainable Neighbourhood	2021-2026	200	Planning application 19/00208/REM Taylor Wimpey Melton Spinney Road. Permitted. Build underway.
	2026-2036	480	Planning application 21/01198/OUT Taylor Wimpey Melton Spinney Road Remainder. Pending Consideration.
	2024-2030	290	Planning application 18/00359/OUT LCC Land Sysonby Farm Nottingham Road. Permitted.
	2025-2033	575	Planning application 21/00973/OUT Barwood Land. Pending Consideration.
	2025-2028	175	Planning application 21/00989/OUT William Davis Land. Pending Consideration
	2024-2035	400	Planning application 18/00769/OUT Richborough Estates land North of John Ferneley College Scalford Road

Melton South Sustainable Neighbourhood	2023-2024	56	Planning application 19/00376/FUL Field OS 0002 Leicester Road (Gladman's land). Permitted.
	2023-2028	249	Planning application 19/00245/REM Field OS 0002 Leicester Road (Gladman's land). Permitted.
	2022-2026	266	Planning application 19/00377/REM Field OS 0002 Leicester Road (Gladman's land). Permitted.
	2026-2036	1500	Planning application 16/00515/OUT currently represents the SSN housing identified in the adopted masterplan. Will either be determined or replaced by updated application depending on Southern Link progress.
War Memorial Hospital, Ankle Hill	2017-2021	85	07/00733/FUL. Planning Permission.
Field No. 3310, Scalford Road	2015-2017	91	13/00497/FUL. Planning Permission.
Field Numbers 5855 And 6071 Nottingham Road	2019-2021	85	14/00078/OUT. Planning Permission.
King Edward Vii Upper School, Burton Road	2022-2025	120	13/00877/OUT. Planning Permission.
Catherine Dalley House, Scalford Road	2022-2023	56	18/00518/FUL. Planning Permission.
St Marys Hospital, Thorpe Road	2024-2025	46	19/00909/OUT. Planning Permission.
Land At South Of Hill Top Farm, St Bartholomews Way	2022-2023	60	19/00342/FUL. Planning Permission.
Field 4100, Lake Terrace	2022-2025	90	17/01500/OUT. Planning Permission.
Jeld Wen Snow Hill Melton Mowbray LE13 1 PD	2026-2035	313	21/00405/FUL. Pending Consideration.

Figure 2-19 - Melton Mowbray Residential Sites



EMPLOYMENT

2.4.22. The NEMMDR will allow new land to be opened up to development to support growth. According to the evidence obtained in support of the Melton Local Plan (as detailed in the Employment Land Review 2015, and the Melton Economic Strategy 2015-2020), a number of the Borough's key employers are currently unable to grow due to a lack of local labour and shortage of freehold development sites.

2.4.23. Melton has a very low unemployment rate (only 0.9% of the working age population claim Job Seekers Allowance). To enable businesses in the Borough to grow, increased labour supply must be provided in the locality.

2.4.24. More jobs require an increase in the working age population, which will arise from planned new households, mostly located within the two proposed Sustainable Neighbourhoods to the north and south of the town.

2.4.25. This is the key function that the NEMMDR helps enable, and sustain for the town, and is the primary employment expansion mechanism that the infrastructure directly helps unlock.

2.4.26. This is particularly important given the demographic challenges the town faces. The population is ageing so it is critical that sufficient housing is supplied to serve a growing workforce.

2.4.27. In allocating 31ha of employment land, businesses will have the opportunity to expand and grow. The above reports highlight a lack of sufficiently large and suitable premises in the town, particularly around the east of the town centre. The additional housing and labour supply enabled by the NEMMDR (both from direct housing acceleration and wider catchment areas through enhanced accessibility of the town), as well as reduced congestion in the town, provide the mechanisms for internal business growth and external investment into the town.

2.4.28. This is particularly highlighted in the letters of support for the scheme from Local Businesses, and that are provided in Appendix C.

2.4.29. Table 2-9 and the supporting map following the table provides an overview of the key employment developments within Melton Mowbray, along with their planning status.

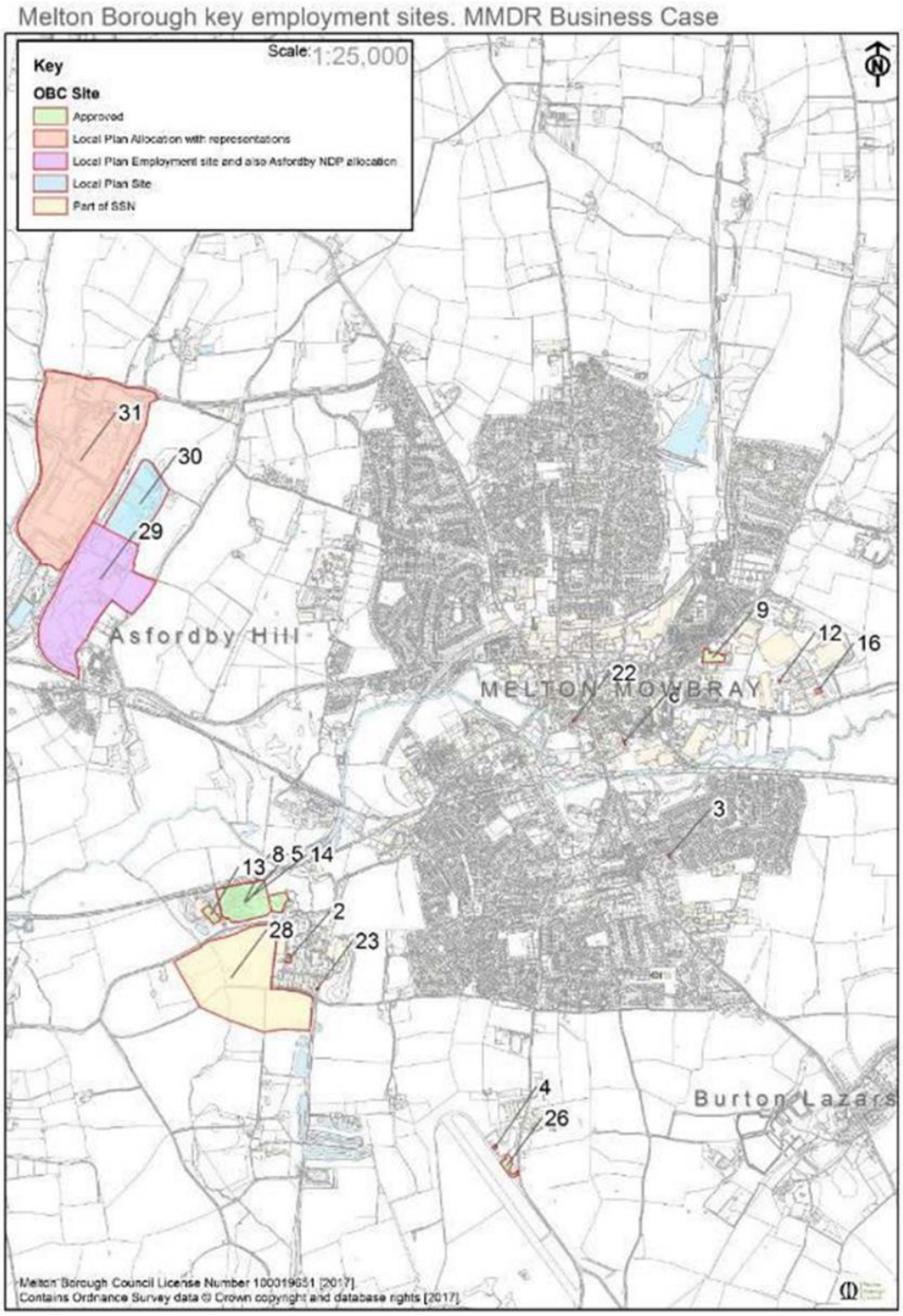
Table 2-9 - Melton Mowbray Distributor Road – Key Employment Sites

Input	GFA – sqm	Comments
Barlows Lodge, Colston Lane	400	Planning approved- application 14/00664/FUL
25 - 29 Pate Road	1130	Planning approved- application 14/00704/FUL
Turnstyle Woodturners, Burton Road	110	Planning approved- application 14/00739/COU
The airfield, Dalby Road	9900	Planning approved- application 14/01013/FUL
Melton Foods, 3 Samworth Way	62900	Planning approved- application 15/00029/FUL
Flextraction Ltd, 44 Mill Street	307	Planning approved- application 15/00268/COU

Belvoir Brewery, Crown Business Park	3227	Planning approved- application 15/00272/FUL
Melton Foods, 3 Samworth Way	53449	Planning approved- application 15/00336/FUL
Melton Building Supplies, 52 Thorpe Road	6575	Planning approved- application 15/00716/FUL
Unit 13 Ground Floor, Crown Business Park	2256	Planning approved- application 15/00767/FUL
The Wheel, 9 High Street	239	Planning approved- application 15/00807/FUL
SEME, Unit 8, Hudson Road	136	Planning approved- application 15/00835/FUL
Kettleby Foods, 2 Samworth Way, Melton Mowbray, LE13 1GA	5000	Planning approved- application 15/00946/FUL
Melton Foods, 3 Samworth Way, Melton Mowbray, LE13 1GA	250	Planning approved- application 16/00258/FUL
Brickfield Farm, Whissendine Road, Leesthorpe, LE14 2XJ	486.6	Planning approved- application 16/00274/FUL
Land At Rear Of MasterFoods 2-8, Hudson Road, Melton Mowbray	2000	Planning approved- application 16/00449/FUL
Agricultural building off Melton Road	1520	Planning approved- application 16/00460/FUL
The Paddock, Brook Farm, Hickling Lane, Long Clawson	27500	Planning approved- application 16/00472/FUL
Land Adjacent of Unit 9, Station Road, Old Dalby	942	Planning approved- application 16/00585/FUL
The Manor, Plungar Lane, Barkestone le Vale, Nottingham	2000	Planning application 16/00595/COU
Woodhill Farm, Nottingham Lane, Old Dalby, LE14 3LX	4200	Planning approved- application 16/00602/FUL
Spencer Osteopath, 18 Church Street, Melton Mowbray, LE13 0PN	128	Planning application 16/00747/COU
28 Digby Drive, Melton Mowbray, LE13 0RQ	100	Planning approved- application 16/00868/FUL
The Garage. 17 Main Street, Stathern, LE14 4HW	327	Planning approved- application 17/00090/FUL
Perfectos Inks Ltd, Units 4 To 5, Normanton Lane, Bottesford	3159	Planning application 17/00332/COU
Land adjacent to Wendover Dalby Road Airfield, Dalby Road, Melton Mowbray	6000	Planning approved- application 17/00353/FUL
Field 7300, Six Hills Lane, Old Dalby	994.49	Planning approved- application 17/00462/FUL
Melton South Employment	200 000	Part of Melton South Sustainable Neighbourhood, and Local Plan

Asfordby Hill Employment Site (Holwell Business Park)	150 000	Local Plan Protected Employment Site
Asfordby Hill Employment Site (Holwell Business Park) (Asfordby Neighbourhood Plan)	32 300	Local Plan Employment site and part of Asfordby Neighbourhood Plan Allocation
Asfordby Business Park (Rebranded as Melton Commercial Park)	100 000	Local Plan Allocation with representations

Figure 2-20 - Melton Borough Key Employment Sites



ENSURING LOCAL BENEFIT FROM ECONOMIC GROWTH

2.4.30. In order to accelerate delivery of this growth, and in light of existing network constraints, the convergence of routes at congested junctions in the town centre, it is recognised in the adopted Local Plan that a strategic intervention by means of the NEMMDR is required.

2.4.31. This is needed to support and accelerate housing and employment delivery, but also to enhance the vitality of the town centre, with the removal of traffic providing opportunities for town centre regeneration and renewal of the urban fabric.

2.4.32. Melton Mowbray has a strong and active visitor economy; and one that will be promoted by the removal of through traffic from the town centre; enabling easier access to and from the town. This is a key aspect of both Melton Borough Council's Economic Strategy, but also that of the Leicester and Leicestershire LEP in creating thriving market towns, with unique characters and economic/cultural activities and attractions.

2.4.33. As well providing a 3m wide combined cycle and footway along almost all of the scheme's length, it also provides opportunities for walking/cycling and better bus travel times in and around the town itself, to ensure that the new housing growth, and existing residents, have greater sustainable travel opportunities than those offered presently.

2.4.34. Complementary measures to the scheme in relation to active travel and public transport are key components of the overall Melton Transport Strategy, being progressed in parallel with NEMMDR scheme delivery.

FUTURE TRAFFIC GROWTH

2.4.35. Because of the above problems, and extent of congestion in Melton Mowbray town centre, LLITM modelling shows that in the future traffic-related problems and issues are likely to extend beyond the town centre without the scheme.

2.4.36. As traffic grows in the future forecasts suggest that without the scheme, there will be a significant rise in vehicle movements through adjacent local villages.

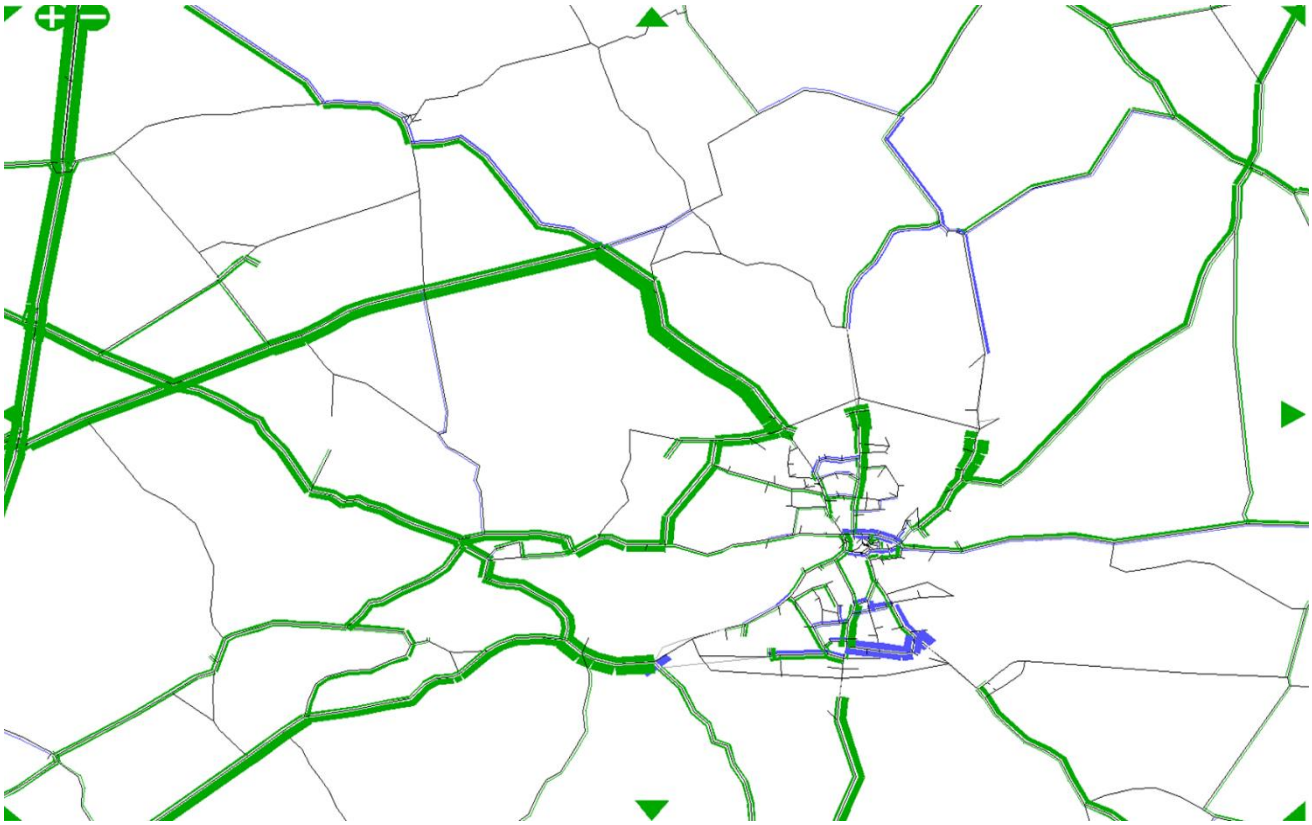
2.4.37. This creates additional concerns in the context of traffic volumes, safety, and severance through some rural villages adjacent to Melton Mowbray itself- notably Asfordby, and Kirby Bellars.

2.4.38. This is as a result of continued slow speeds through the town centre, and the provision of the Southern Link, if not also developed in conjunction with the wider NEMMDR scheme.

2.4.39. Figure 2-21 below shows an increase of nearly 225 pcu's an hour in each direction along Station Lane to the west of the town of Melton Mowbray, and through the villages of Asfordby, Asfordby Hill and Asfordby Valley (marked by a red circle) and surrounding settlements, including Kirby Bellars (marked by an orange circle).

2.4.40. This represents a diversion of traffic that is seeking to travel to the A46, and should be doing so via the A606, rather than through adjacent village locations.

Figure 2-21 - LLITM 2025 v 2040 Core AM Peak Flows (Green indicates increase; blue indicates decrease)



2.4.41. As very rural routes, with limited visibility, sharp bends, a single lane humpback bridge and village locations, these routes are unsuitable for strategic traffic movements across the town, with the NEMMDR enabling a shift for such traffic onto the most appropriate routes in directly connecting the A606-A607-A606 corridor.

2.4.42. Any such increase in traffic will have a negative effect on road safety, air quality and severance in Asfordby and surrounding villages.

TRAFFIC MODELLING – FUTURE YEAR 2040

2.4.43. Figure 2-22 and Figure 2-23 show forecast traffic volumes within Melton Mowbray in 2040 forecast year for the AM Peak and PM Peak hours. Forecast traffic volumes for the additional years modelled (2025, 2030, 2035, 2039, 2040 and 2051) can be found in the LLITM Traffic Forecasting Report as part of Appendix D.

2.4.44. The figures indicate the higher flows on a significant number of links within the network for both peak hours. The pattern of high traffic flows remain at the same junctions around the western side of the town centre gyratory. Traffic flows on the eastern side of the gyratory (Snow Hill round to Thorpe End) remain low relative to the western side of the gyratory.

2.4.45. Although the introduction of the Southern Link between the A607 Leicester Road and the A606 Burton Road provides additional capacity to the network which is forecast to increase average speeds within Melton Mowbray, it can be seen that traffic growth has resulted in noticeably higher flows on the A607 Leicester Road approaching the Southern Link (Kirby Lane).

2.4.46. To an extent, the Southern and Northern Link Roads in the Do-Minimum have mitigated some of the effects of traffic growth by providing some additional capacity for the Sustainable Neighbourhood Developments and through traffic. However, this is primarily for more localised east-west movements rather than cross town, or north-south through moments along the A606 and A607, both of which as demonstrated earlier are significantly greater in volume.

Figure 2-22 - 2040 AM peak Forecast Vehicle Flows

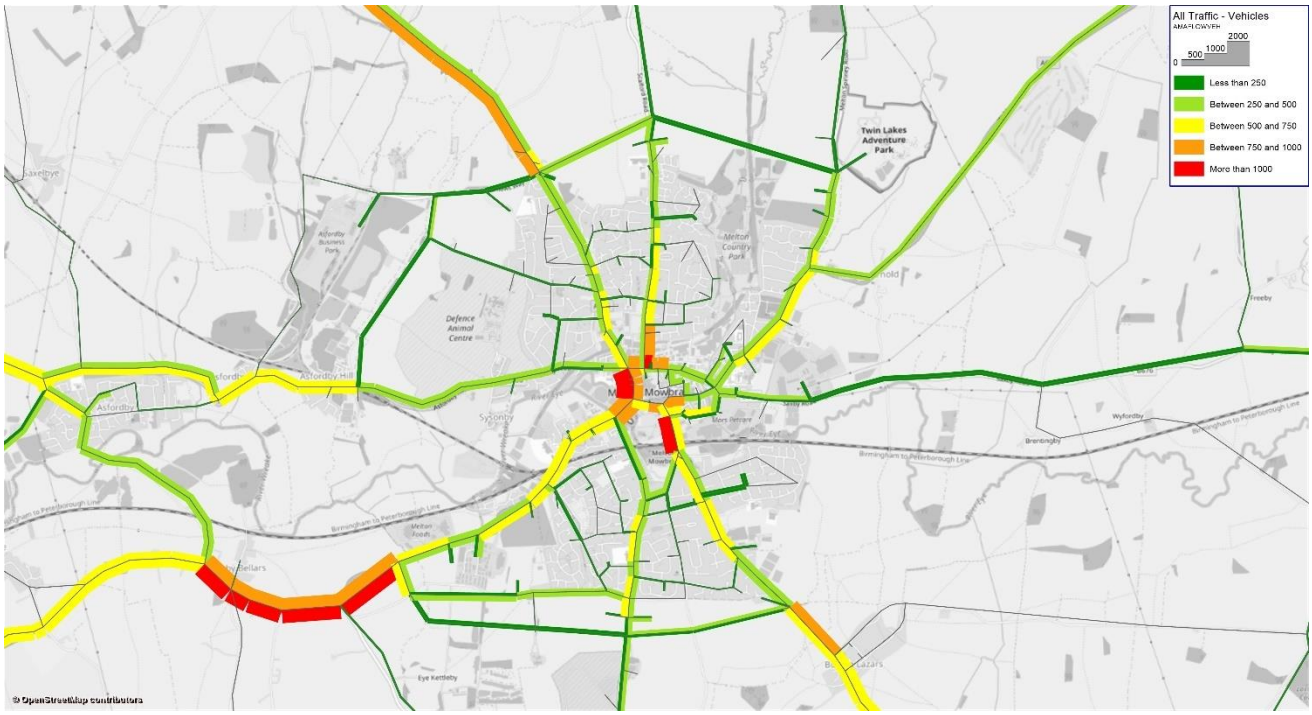
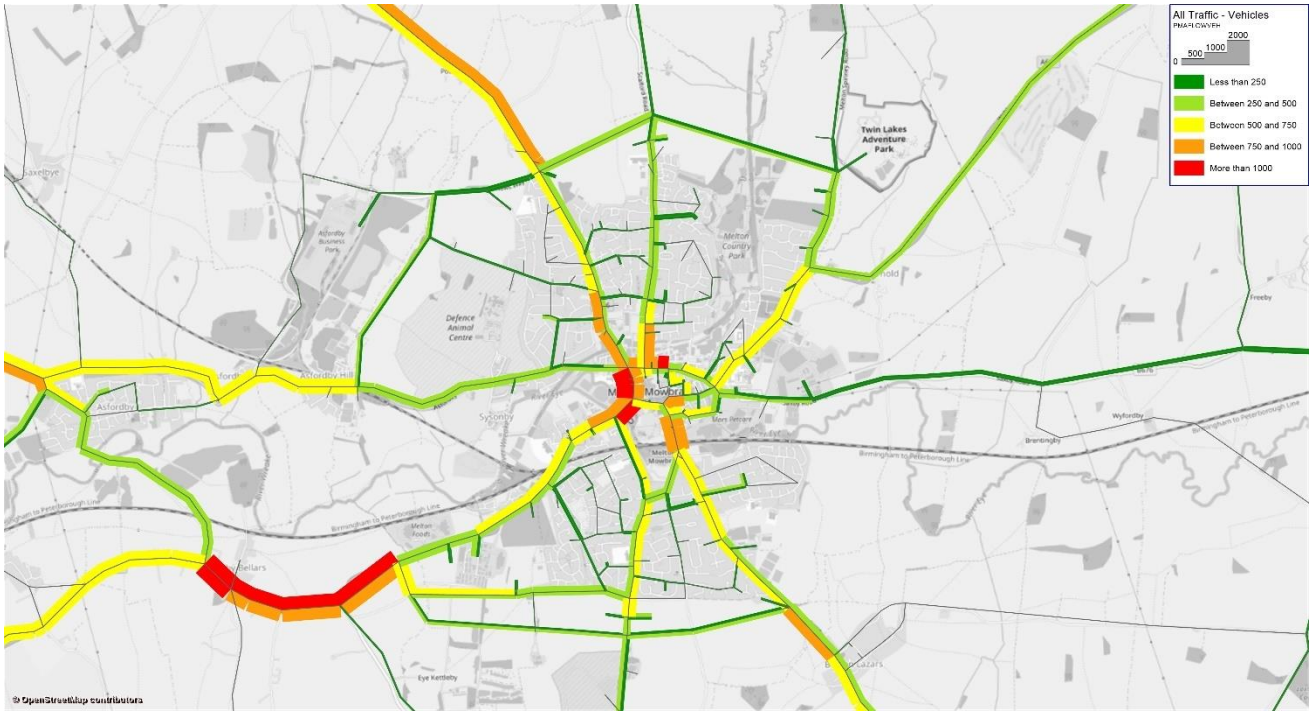


Figure 2-23 - 2040 PM peak Forecast Vehicle Flows



2.4.47. As shown in both Figure 2-22 and Figure 2-23, all traffic issues and congestion worsen without the intervention of the NEMMDR.

2.4.48. The LLITM Traffic Forecasting Report (included in Appendix D) provides further analysis of the future extent of traffic related issues on the Melton Mowbray highway network, including an assessment of town centre junction delays; levels of congestion; volume to capacity ratio on links and approaches; levels of through traffic and levels of HGV through traffic.

NO CHANGE SUMMARY

2.4.49. Within the town, high levels of traffic are already presenting barriers to travel, alongside the high level of anticipated development proposed in the adopted Local Plan together with the associated employment and homes the problems are expected to be exacerbated in the future as a result of a growth in demand for travel.

2.4.50. Melton Mowbray will continue to have high levels of through traffic; through traffic that impacts on residents as a result of the routes that such traffic is forced to take, as well as further impacts on the attractiveness of the town to the visitor economy, curtailing the extent and attractiveness of the historic market town centre.

2.4.51. This is particularly the case given the proportion of traffic that is HGV and LGV, both as a percentage of overall traffic, and absolute volumes, with the corresponding noise, safety, severance and air quality problems also brought by these movements, alongside significant forecast growth of such movements in the future.

2.4.52. As a result of the current network configuration converging on several key junctions, and with the geographical constraints of the river and rail line, resilience of the network will remain poor with corresponding impacts on reliability. This will be exacerbated as Melton Mowbray continues to grow, with impacts over time also extending to adjacent villages, as well as the town centre, if no improvements are delivered.

2.4.53. The forecast increase in travel demand and congestion without the scheme will make implementation of improvements to public transport and active travel provision impractical.

2.5 DRIVERS OF CHANGE

2.5.1. When the transport problems and issues are considered collectively, a clear need for intervention is established. Some of the key identified drivers of change are:

- The need to provide alternative modes of transport to the private car within the town centre through reducing through-traffic.
- Due to the inherent delays created within the town centre, bus services are unattractive and commercially unviable as well as limited safe active travel routes.
- A need to address the current gap in skills due to the relatively low skilled jobs that are available in the town.
- Ambitious employment and housing growth targets within the respective Local Plans.
- The need for a reduction in HGV and LGV movements within the town to improve overall safety, noise and air quality issues.

2.6 OBJECTIVES

2.6.1. The scheme objectives have been derived from the comprehensive evidence base previously detailed that has been collected and agreed by Leicestershire County Council as the Highway Authority and Melton Borough Council.

2.6.2. The schemes objectives are thus as follows:

- **Objective 1:** Improve access to Melton Mowbray town centre enabling full growth potential: To improve accessibility to jobs and retail centre via significantly reducing current severe levels of congestion and journey time unreliability in the peaks.
- **Objective 2:** Reduce congestion on the local network, in particular key pinch points in and around Melton Mowbray town centre: To divert the through traffic away from the town centre onto more suitable roads and therefore to improve the vitality and viability of the town centre;
- **Objective 3:** Reduce impact on rat-run routes via improving the south-north connectivity.
- **Objective 4:** Remove HGV and LGV through traffic in Melton Mowbray town centre.
- **Objective 5:** Improve access to the areas of potential development in the Local Plan.
- **Objective 6:** Promote a quality space in the town centre, suitable for non-transport uses and attractive to inward investment.
- **Objective 7:** Increase levels of public transport, walking and cycling use within the Study Area.
- **Objective 8:** Improve highway safety for all road users within the Study Area.

2.6.3. The objectives were derived from an evidence-led process, agreed through consultation undertaken between 2014 and 2016 with Local Authorities, the Local Melton Mowbray Transport Stakeholder Reference Group and workshops with local highways officers.

2.7 MEASURES FOR SUCCESS

2.7.1. For the specific objectives, indicative ‘measurements’ have been identified and agreed by the project team. These will be used to assess the performance and success of the preferred scheme option.

2.7.2. These measurements act as conditional outputs, i.e. as quantitative indices against which to measure the performance of scheme, against the key themes and objectives of the study.

2.7.3. Three core themes have been identified, namely Congestion, Economic Growth and Sustainable Transport. A list of the measurements for each of the intervention specific themes are detailed in Table 2-10.

Table 2-10 - Conditional Outputs

Theme	Measurement
Congestion	▪ Improvements to north-south journey times along the A606 corridor. ▪ Reduction in congestion within the town centre. ▪ Reduction in the proportion of HGV and LGV through traffic.
Economic Growth	▪ Improved journey times and access to key employment locations. ▪ Creation of new jobs. ▪ Increase in housing completion. ▪ Increase in development sites coming forward.
Sustainable Transport	▪ Increase in public transport patronage. ▪ Improvement in levels of waking and cycling in and around the town centre.

Theme	Measurement
	▪ Improvement of highway safety, particularly for pedestrians and cyclists.

2.8 SCOPE

2.8.1. The main aim of the scheme is to tackle longstanding congestion and traffic related problems in Melton Mowbray, enabling and facilitating the acceleration of significant housing and employment growth, including the delivery of Northern and Southern Sustainable Neighbourhoods and associated employment land, which are the prime focus for growth in the town.

2.8.2. The scheme entails construction of a single carriageway road, circa 7km in length, to the north and east of Melton Mowbray. The route extends from the A606 Nottingham Road at the north-western edge of the town to the A606 Burton Road in the south, crossing Scalford Road, Melton Spinney Road, A607 Thorpe Road and B676 Saxby Road to Burton Road. The scheme will create new junctions with the radials on its route and provide crossings over the railway line and the River Eye. The scheme includes a 3m wide combined cycle and footway along almost all its length.

2.8.3. The scheme will provide direct connection to a developer-led masterplan to the south of Melton Mowbray, which provides highways infrastructure (the Southern Link) that connects to the A607 Leicester Road.

2.9 CONSTRAINTS

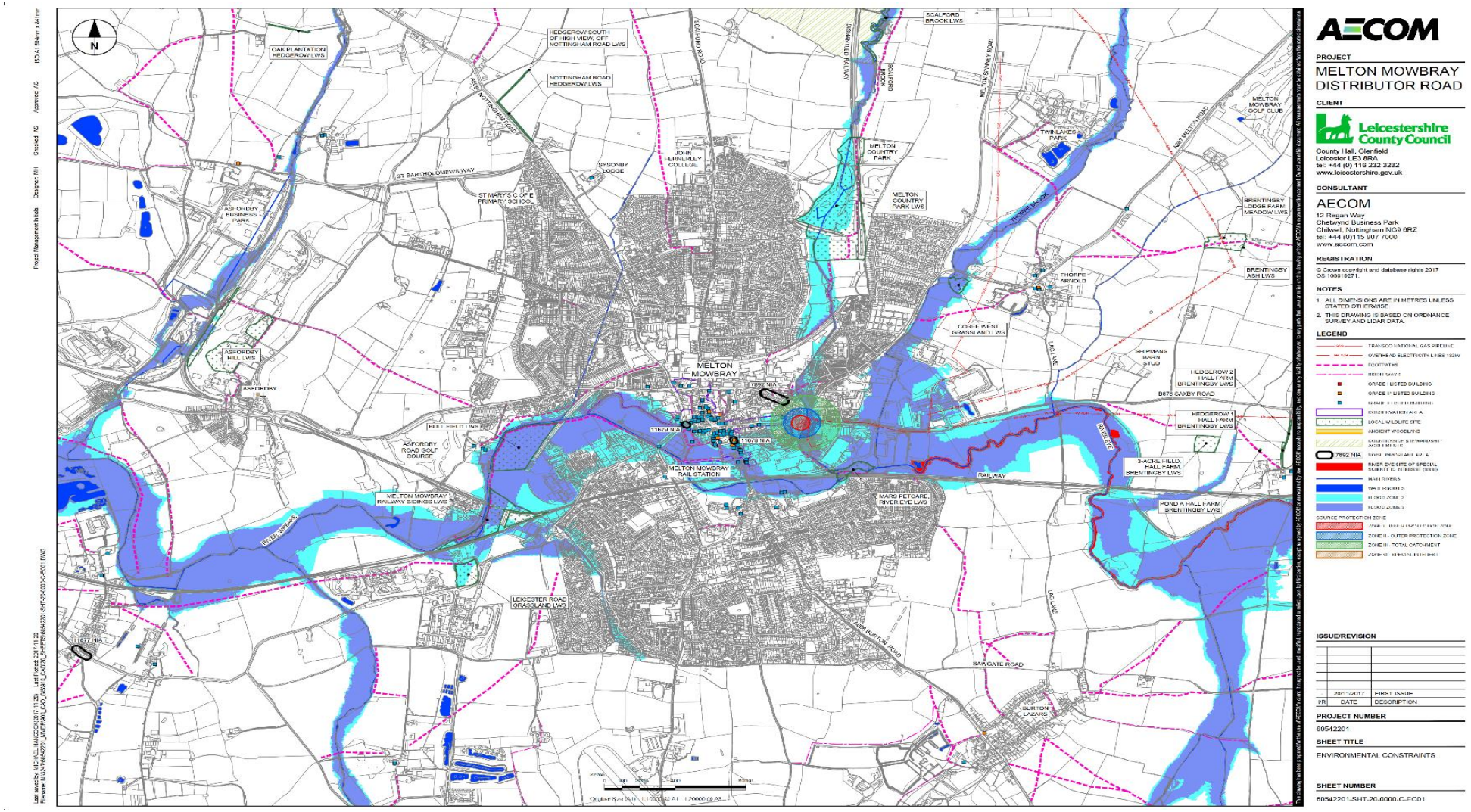
ENVIRONMENTAL CONSTRAINTS

2.9.1. Figure 2-24 shows the Environmental Constraints within the area for the proposed scheme.

2.9.2. The map identifies the location of key constraints affecting the area including:

- Indicative Fluvial Flood Zones 2 and 3
- Main Rivers
- River Eye Site of Special Scientific Interest (SSSI)
- Railway Line crossing
- Grade I & II Listed Buildings
- Melton Country Parks
- Footpaths
- TRANSCO National Gas Pipeline
- Overhead Electricity Lines 132Kv
- Local Wildlife Sites
- Water bodies

Figure 2-24 - Environmental Constraints Map



FINANCIAL CONSTRAINTS

2.9.3. The scheme successfully secured £49.5m of Government funding following a bid to the DfT Large Local Major Schemes Fund in May 2018. The Southern Link between the A606 Burton Road and the A607 Leicester Road has been given approval as part of the Housing Infrastructure Fund (HIF), however for the HIF funding to be released, funding approval for the NEMMDR needs to be in place (i.e. passed through the FBC approval process).

2.9.4. While funding has been secured, there is a risk of potential financial constraints should there be any significant programme or funding delays and subsequent increases in costs due to inflation. This is further discussed in the Financial Case.

2.10 SYNERGY

2.10.1. There is synergy between the NEMMDR scheme and the planned Southern Link which will serve the Southern Sustainable Neighbourhood.

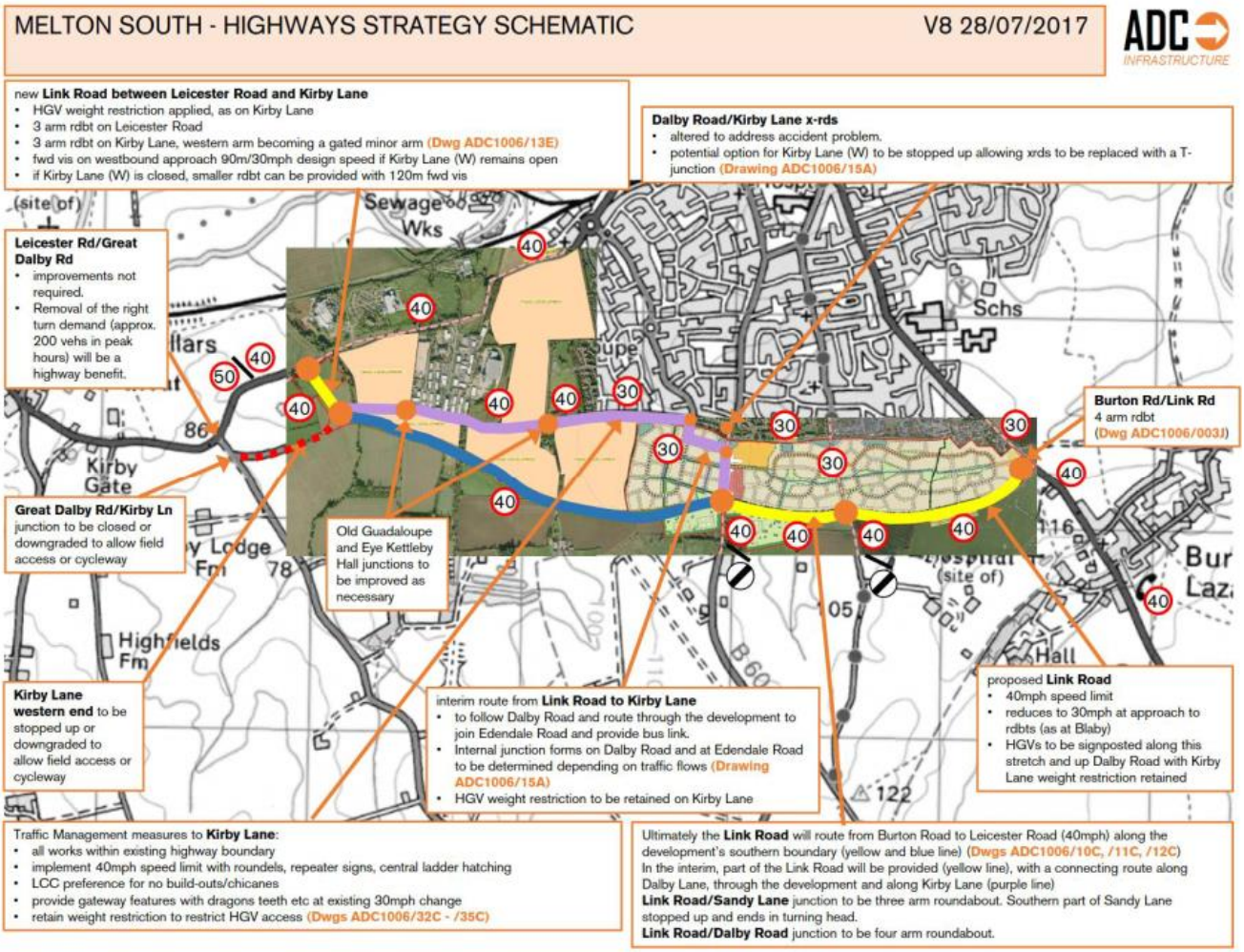
2.10.2. The addition of the Southern Link will lead to a further reduction in through traffic in Melton Mowbray, bringing additional benefits through a further reduction in congestion on the local network and supporting housing delivery, with the A607 through the town reclassified.

2.10.3. In December 2021, an agreement was concluded under the Housing Infrastructure Fund to support the Southern Link, with Leicestershire County Council expecting to receive £18.2 million from Homes England towards the total cost of £37.5 million.

2.10.4. The current timeframe for delivery of the Southern Link is for the planning process to begin in January 2023, with onsite work starting in March 2024 and the road opening in October 2025.

2.10.5. A diagram showing the Melton South developers' proposals (including supporting transport infrastructure) is provided in Figure 2-25.

Figure 2-25 - Melton SSN Transport Infrastructure Proposals



2.11 STAKEHOLDERS

2.11.1. Stakeholders for the project include Leicestershire County Council, Melton Borough Council, the other Leicestershire district councils, Leicester and Leicestershire LEP, the Federation of Small Businesses, the Southern Developers (led by Pegasus Group), the Northern Developers (as a consortium of developers), the appointed contractor (Galliford Try), the Melton Transport Stakeholder Reference Group, Midlands Connect, National Highways, the DfT, the Office of Road and Rail, Transport Focus, Homes England and the Crown Estate.

2.11.2. This is alongside key businesses in the town, bus operators, schools, ward members, parish councils, small landowners and local residents themselves.

CONSULTATION AND STRENGTH OF SUPPORT FOR THE SCHEME

2.11.3. Consultation to date has identified strong local support for a distributor road, and workshops with key stakeholders have informed the Transport Strategy Evidence Base, and Options Assessment Report. For instance, on 3rd July 2014 around 100 residents attended a conference in Melton Mowbray for consultation on the Issues and Options in the adopted Local Plan, which included this scheme.

2.11.4. As part of this process, LCC held a public consultation in September and October 2017 to present the recommended route and request feedback on the scheme.

2.11.5. A report was prepared by Jacobs on the behalf of LCC detailing the findings of the consultations, as shown in Appendix E.

2.11.6. In total, 226 responses were received on the consultation. Responses were received from across the Melton Borough scheme area and beyond.

2.11.7. Responses were received from a broad range of residents, based on analysis of the demographic questions on the consultation questionnaire. Most residents travel into or through Melton Mowbray on a weekly basis (92%). The majority of respondents (88%) were car drivers and reside in the local area (88%).

2.11.8. The majority of the comments made in relation to the scheme were positive (71%), 18% were negative and 11% were neutral.

2.11.9. Based on the responses from the questionnaire, most respondents (51%) agreed with the recommended route for the distributor road, 34% disagreed.

2.11.10. Examples of consultation feedback is provided below:

- “The road is obviously badly needed and we support it”
- “As a business operating in the centre of the town, we care more about the existence of the Distributor Road to take unnecessary traffic away from the town centre than its exact route, though we would like to see the full ring completed in due course.”
- “A good balance of impact on the landscape with reduction of congestion in Melton town.”
- “Eastern distributor Road seems to be a sensible option & will be a good start. A bypass is needed asap”
- “Could do with the bypass extending to Leicester Road but this bypass will be a good start.”
- “Anything to improve the traffic situation in Melton can only be a good thing. The route is as good as can be.”
- “Recommended route will ease congestion and will allow development of business infrastructure.”
- “I believe it will relieve the congestion in the town and even allow Market Place (the street south of the market place) to be free of lorries and much of the through traffic in the very centre of town.”
- “Melton and the surrounding area desperately needs this road, to relieve the frequent serious congestion that stifling growth.”
- “Recommended route will ease congestion and will allow development of business infrastructure.”
- “Sensible route taking into account the crossings with other roads. Hope the link to Leicester Road will happen soon after this distributor road is done.”
- “Melton clearly needs a distributor road. I've considered the routes carefully and I can see that the geography, topography and land use around the town makes if difficult to create a 'perfect' route. By that I mean that the recommended route is not perfect, but it's the best of the options available.”
- Of those that disagreed with the route, respondents highlighted the point that they believe the recommended route does not address Leicester road traffic (12 mentions); that Melton needs a full ring road bypass around the town (12 mentions); and that the scheme won’t solve the problems experienced in the town, mainly as it also needs to connect to Leicester Road (9 mentions).

2.11.11. Of the 226 responses to the consultation, the proportions that agreed the following factors had been sufficiently taken into account in identifying the recommended route were:

- 45% agreed that minimising the impact on the environment had been taken into account, whilst 28% disagreed. The remaining respondents felt unable to comment.
- 46% agreed that minimising the impact on residents (including noise and air quality) had been taken into account; and 30% disagreed.
- 56% agreed that minimising congestion in the town had been taken into account and 33% disagreed.

2.11.12. Of those that disagreed responses were generally related either to alternative routes, or the need for a further extended/ ring road route around the town in equal magnitudes.

2.11.13. Comments related to the environment also received a considerable number of mentions, with noise pollution (18 mentions) and air quality impact/ air pollution (17 mentions) being the most prominent.

2.11.14. Further comments included consideration of noise and concerns were raised regarding the effects of the scheme on the wildlife corridor in Melton Country Park (4 mentions).

2.11.15. Table 2-11 provides more details of the main issues raised by respondents during the consultation process, and the plans to be adopted for further consultation and scheme design.

Table 2-11 - Main Issues Raised During Consultation

Issues Raised	Evidence	Decision / further comment
Some consultees expressed a preference for a Western Route over the recommended route.	1. Both 2016 and 2017 Option Appraisal Reports reaffirmed significantly higher benefits of recommended route over western option 2. Western is a longer route due to environmental and built environment constraints (0.6-1km) leading to lower benefits, and likely greater scheme cost. 3. Additional rail structure and wider span bridges compared to recommended route to the west adds to comparative cost. 4. 4. Additional built environment constraints of presence of gas main and MOD land	Proceed with recommended route on the basis that this remains the most popular from consultation, and 60% higher transport user benefits, and is a shorter route.
Impact of the alignment on Melton Country Park. Concerns raised through consultation with residents and Friends of Country Park: - Effects on ability of wildlife to migrate north/south	1. Northern Edge Development parcel and road constraint 2. Performance of the route in fulfilling its function as a distributor road.	Continue to meet with, with Friends of Country Park to discuss possible mitigation. ▪ Wildlife corridor under the proposed Scalford Brook open- span bridge. ▪ Possible landscaping mitigation ▪ No plans for lighting away from junctions.

- Visual and noise impact including lights		▪ Consideration of access arrangements north south including options for re-routine Jubilee Way
A small number of consultees (3) expressed a preference for Option 2 Eastern Route over the recommended Eastern Route.	1. Additional cost due to longer route of Option 2. Estimated impact of £7m-9m. 2. Less appealing route to road users due to additional length 3. Location of Environment Agency's Brentingby Flood Alleviation Scheme along route of Option 2. EA negativity towards this alignment option. 4. Additional structures involved leading to greater scheme. 5. Greater expanse of floodplain to cross.	With indications regarding costs, the impact on BCR and the fact that EA would almost certainly not approve a route that impacted on the flood alleviation scheme, the recommended route is to be taken to detailed design.
Why was southern section connecting A606 (Burton Road) to A607 (Leicester Road) not included in the scheme.	1. Developer led section, as part of planning permission submitted. 2. Although the southern link will provide benefit, including this in the recommended route scheme would lower the overall BCR and reduce the chance of gaining funding.	Continue to work with developer and support forward funding on the understanding that developer contributions will be sought at a later date.
Move the alignment east, away from Thorpe Arnold village	1. As discussed under Option 1/2 above 2. To maintain a distributor road route that is an attractive option for through traffic a balance has to be sought between impact on residents and the delays to journey times of an option that pushes the alignment further east.	Work to understand the noise and visual impact of the route and options for mitigation is already underway. This might include landscaping, low noise surfacing and noise barriers.
Move the alignment west at Saxby Road/River Eye crossing away from single residential properties.	1. Pushes alignment closer to residential estate to the east of Melton Mowbray and Thorpe Arnold – noise and visual impact on greater number of people 2. Slightly longer route 3. River and powerline constraints	The original alignment has been moved west as part of its development from concept design, lessening the direct impact on individual properties and any noise and visual impacts. Work to understand the noise and visual impact of the route and options for mitigation is already underway. This might include landscaping, low noise surfacing and noise barriers.

Impact on residential estate to east of Melton Mowbray. Move alignment east.	1. As discussed under Option 1/2 above 2. To maintain a distributor road route that is an attractive option for through traffic a balance has to be sought between impact on residents and the delays to journey times of an option that pushes the alignment further east.	Work to understand the noise and visual impact of the route and options for mitigation is already underway. This might include landscaping, low noise surfacing and noise barriers.

2.11.16. The scheme is also viewed very favourably by local residents, MP, the LLEP and key project stakeholders. Strong letters of support can be found in Appendix C.

2.11.17. Councillor Ozzy O'Shea, LCC cabinet member for Highways, Transportation and Flooding, said: "The MMDR is also a key, and significant piece of infrastructure to accelerate growth and housing delivery to the town, with over 6000 dwellings and 31ha of employment land directly related to the provision of this infrastructure in Melton; and as stated is necessary infrastructure in the Local Plan. For forty years, the people of Melton have been asking for a bypass, and it is critical this project goes ahead for the growth the local area and benefit of the local community."

2.11.18. Melton Borough Council leader, Councillor Joe Orson, said: "Supporting the County Council to deliver the N&E MMDR is one of Melton Borough Council's key priorities within its Corporate Strategy 2020-2024. It is the key piece of infrastructure that is required to deliver the Council's adopted Local Plan (2018) which focusses significant growth in Melton Mowbray "

2.11.19. The MP for Rutland and Melton, Alicia Kearns, also added: "As the Member of Parliament for Rutland and Melton, investing in roads and transport has always been one of my main priorities, and I have continuously campaigned for the development of the MMDR. My campaigning on this issue reflects the overwhelming support residents have for the construction of the road, most recently evidenced by an outpouring of supportive letters following the initial remedial work that began for the MMDR back in April."

2.11.20. A number of additional letters of support have also been received from key businesses in the town, generally highlighting the congestion reduction benefits, the benefits of this to their businesses, and for associated expansion plans.

PUBLIC INQUIRY 2021

2.11.21. The Compulsory Purchase Order (CPO) and Side Roads Order (SRO) notices for the NEMMDR were submitted to the Secretary of State for confirmation on 21 October 2020. However, several objections were received and subsequently a Public Inquiry was called to consider the objections on 15th January 2021.

2.11.22. The NEMMDR Public Inquiry was opened by the Inspector on 21st September 2021 and closed on 7th October 2021.

2.11.23. Between the call for the Public Inquiry and its opening, several minor modifications were required to the CPO and SRO which were necessary to ensure accuracy, consistency as well as address some concerns raised by landowners. The modifications made did not comprise any increase in the land required for the scheme and relevant parties have been consulted.

2.11.24. In total, there were initially 22 objections, which reduced to 13 as the Inquiry concluded.

2.11.25. It was announced on the 31st March 2022 that the proposed Compulsory Purchase Order and Side Roads Orders (including modifications) had been confirmed.

STATUTORY CONSULTEES

2.11.26. Alongside local engagement, LCC has also undertaken early and proactive engagement with statutory consultees. This has been developed through regular dialogue and specific meetings on key items, with outcomes from these meetings summarised in Table 2-12.

Table 2-12 - Statutory Consultees Overview

Consultee	Key Remarks
Environment Agency	Following early engagement, the Environment Agency (EA) expressed that they are "pleased that the proposed route avoids crossing our flood defence asset at Brentingby." However, the EA have also expressed concerns about the potential impacts on the River Eye SSSI and the possible adverse effects on protected habitats and species. The authority took the comments of the EA fully on board and continued to meet with officers to find a satisfactory way forward. The proposal for the SSSI were developed with the EA to ensure their initial concerns could be dealt with. All requirements were included in the planning conditions for the scheme and have since been discharged. No objects were raised at the Public Inquiry.
Natural England	Initial engagement with Natural England (NE) highlighted concerns about the potential impact of the NEMMDR on the integrity of the River Eye SSSI. At an early-stage NE indicated that they would be unlikely to consider a diversion of the River Eye in order to accommodate a crossing over a particularly constrained section of the proposed route. Continuous engagement was held with NE and a set of planning conditions were developed which included:: ▪ Management and monitoring plant agreement to mitigate for impact on the River Eye SSSI including Ecological Monitoring to ensure restoration to the required standard and appropriate management thereafter; ▪ Surface Water Management Plan; ▪ Biodiversity Net gain approach; and ▪ Construction Management Plan and appointment of an ecological clerk of works. All planning conditions have since been discharged, with no objections being raised at the Public Inquiry by NE.
Historic England	In their response to the consultation Historic England raised concerns regarding the impact of the developer led Southern Sustainable Neighbourhood section (at the join of the proposed NEMMDR A606 Burton Road roundabout) on the setting of the Scheduled Monument of St Mary and St Lazarus Hospital. Whilst the impact is related to setting, further discussions are ongoing in relation to the proposed route for the southern sustainable neighbourhood.

National Highways	National Highways (then Highways England) have expressed support for the scheme and recognise the importance for the scheme in the context of growth for Melton Mowbray. "Highways England recognise the need for growth in Leicestershire, as well as this being best concentrated in urban centres. Any improvements to infrastructure, including the Melton Mowbray Distributor Road are seen as supporting this growth." A letter of support from National Highways can be found in Appendix C.
Sports England	Have confirmed that they have no issues to raise with regard to the proposal.

CONSULTATION & ENGAGEMENT WITH DEVELOPERS - MELTON NORTH

2.11.27. During 2017, LCC and representatives of the Northern Sustainable Neighbourhood (NSN) consortium of developers worked together to progress an alignment that satisfies the need to accommodate and accelerate housing and the requirement for a distributor road that is fit for purpose.

2.11.28. A series of design meetings took place between June and December of 2017 in order to discuss the detail of any amendments to the draft alignment and design to reflect local development access.

2.11.29. In addition to meetings and other communication throughout the preliminary design period the NSN consortium participated in the consultation process that took place between September and October 2017.

2.11.30. The consortium is strongly supportive of the scheme and appreciative of its role in accelerating the delivery of growth in Melton Mowbray. Communications throughout this period have enabled both parties to gain an understanding of requirements both in terms of the functioning of the road and practicalities around design and environmental constraints and ensuring that the alignment and design does not impact on the need to deliver the housing allocation set out in the adopted Local Plan.

2.11.31. This is documented in their letter of support, in Appendix C.

2.11.32. The collaborative work to date will be incorporated into the masterplan for the first stage of the Northern Sustainable Neighbourhood delivery between Nottingham Road and Scalford Road.

2.11.33. An important part of this commitment is also in relation to developer contributions, and as detailed in the Northern consortium letter of support in Appendix C.

2.11.34. The NEMMDR scheme will also help to provide further market confidence to private sector housing delivery because it will result key infrastructure in the adopted Local Plan being delivered as a whole in one phase, rather than in staggered phases. This is important because the full benefits will only be realised once the entire route is delivered.

CONSULTATION & ENGAGEMENT WITH DAVIDSONS DEVELOPMENTS - MELTON SOUTH

2.11.35. In developing proposals for a Sustainable Neighbourhood to the south of Melton Mowbray, Davidsons developments has sought to work collaboratively with the Borough Council and engage with the local community.

2.11.36. A public consultation event took place in July 2014. This consultation invited comments on the proposals for a southern extension including a new distributor road from Leicester Road to Burton Road alongside more detailed proposals for a first phase of development off Burton Road.

2.11.37. A public exhibition was held on the 18th July 2014 and was advertised through the delivery of some 3,000 leaflets to homes and businesses in the surrounding area. Leaflets were also distributed to Burton and Dalby Parish Councillors and Borough Councillors for the wards of Melton Craven, Dorian and Warwick. Posters advertising the exhibition were placed in the vicinity of the site and in a number of local venues. A website was also set out providing information on the proposed development.

2.11.38. As part of the engagement on the adopted Local Plan, Melton Borough Council set up reference groups as a forum to keep residents and other parties informed of progress on the plan and get input as the plan was progressed. Davidsons Developments attended sessions of the Landowners and Developers Reference Group and Full Reference Group between November 2014 and March 2016, providing information on the proposals for the South Melton Sustainable Neighbourhood as required.

2.11.39. Meetings were also held with representatives of Swallowdale Primary School and local sports clubs to explain the emerging proposals. Representatives for Davidsons have also attended Shout4Residents meetings to explain the development proposals.

2.12 OPTIONS

2.12.1. A full TAG-compliant Options Assessment Report (OAR) has been developed and provided as a standalone Options Assessment Report in Appendix A. A high-level summary of the outcome of this is provided in this section.

A substantial amount of work has previously been carried out in the option development and initial sifting stage for this scheme. The Option Assessment Report consolidates a number of previous reports (including the Transport Evidence Base for Melton - Phase 1 & 2 reports) – and presents the most recent analysis from the latest LLITM 2014 Base (2017 release) model and datasets, which supports development of the preferred scheme.

DEVELOPMENT OF OPTIONS AND INITIAL SIFTING

2.12.2. A wide range of options were compiled through engagements with multiple stakeholders, which covered all modes and scales of options, and included public transport, highway infrastructure, traffic demand management (e.g. park and ride), land-use changes and cycling and pedestrian improvements. In total, a long list of 60 transport options were identified, this list is included in Appendix A.

2.12.3. The results of the initial sifting exercises of the long list options are included in Appendix A with scores for options and the reason for not progressing further clearly recorded.

2.12.4. The initial sifting ultimately resulted in 6 bypass options of varying extents and locations around the town that could broadly be grouped into two categories: inner bypass options and outer bypass options.

2.12.5. These six options were modelled in LLTIM and subsequently appraised in detail to aid the selection of a preferred option.

ROUTE OPTIONS STUDIES

2.12.6. For the shortlisted options, multiple route studies were conducted, comparing inner bypass options and outer bypass options as well as different alignments.

2.12.7. The route option studies included:

- **Inner Bypass v. Outer Bypass Option Assessment (2015)** – concluded that an outer relief road was the preferred option for providing significant additional highway capacity, as reflected by the September 2015 Cabinet resolution *"That the County Council should work jointly with Melton Borough Council (MBC) to seek to develop a Melton Mowbray Transport Strategy, which would focus at this time on work to identify a preferred corridor for an outer relief road for the town"*.
- **Outer Bypass Options Assessment (2016)** - four 'outer' distributor road options were tested, as developed from the options generation and shortlisting stage. The study concluded that based on the traffic flow analysis, delay reduction impacts, transport user benefits and the lower cost of an Eastern Route, a distributor road to the east of the town was likely to be the most successful option in meeting the key objectives.
- **Updated Model (2017 OAR Refresh)** – two of the options from the 2016 OAR (Western and Eastern Route options) were re-tested in the 2017 updated LLITM 2014 Base model. This concluded that the Eastern alignment was still preferable based on both transport user benefits and value for money.

2.12.8. Further detail on the above studies and the outcome of the Eastern alignment as the preferred option can be found in Appendix A.

PREFERRED OPTION

2.12.9. The route option studies, as outlined above, indicated that on both quantitative and qualitative bases, a North and Eastern MMDR scheme represents the preferred solution.

2.12.10. The preferred scheme provides:

- A highly significant increase in the level of user benefits of the next nearest option (60%);
- The greatest benefit for through traffic, and thus to the town centre and critically constrained junctions as a result;
- Support through consultation results, with a majority of Melton residents expressing that they agreed with the preferred route;
- A lower cost than a similar route to the west, with consequential impacts on the Economic Case and ability of Government to fund (and afford) the scheme;
- The ability to deliver the full extent of housing and employment growth proposed in the adopted Local Plan; unlike the Northern or Southern sections on their own;
- Scored more highly on almost all qualitative scheme objectives than alternative options, assessed from the perspective of three different transport groups; and
- The greatest opportunity to support walking, cycling public transport and urban realm improvements in the town as a result.

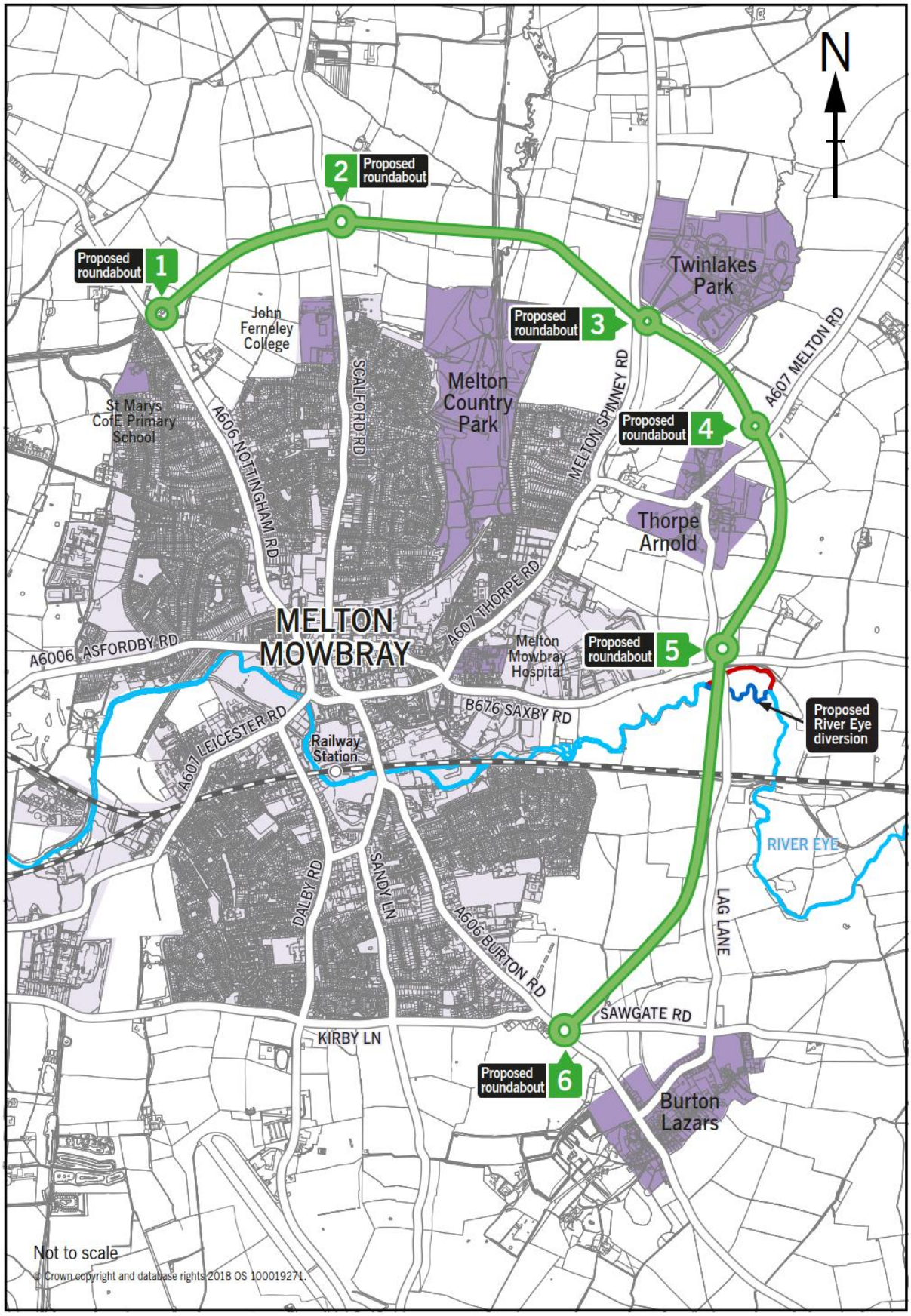
ALIGNMENT OPTIONS

2.12.11. As part of the further development of the North and Eastern option two main alignments were considered.

2.12.12. These were developed from the environmental constraints and preliminary design work undertaken; and with a need to cross both the river and rail line, only a small number of options were feasible. The preferred alignment allows for a reduced land take created by the roundabout with Saxby Road, and whilst also ensuring that the alignment is maintained as far away as possible from Thorpe Arnold.

2.12.13. Figure 2-26 shows the preferred route for the scheme.

Figure 2-26 – NEMMDR Preferred Route



2.13 STRATEGIC CONTEXT

2.13.1. The Red Amber Green (RAG) assessment below summarises the strategic fit of the scheme with key national, regional and local policy documents.

2.13.2. Table 2-13 below shows that the scheme has a good fit with local, sub-national and national policies in relation to housing delivery, transport, and economic growth - as identified through the scheme objectives themselves.

Table 2-13 - Strategic Fit

Strategic Fit with Scheme		
	Strong strategic fit with policy	
	Neutral / minimal strategic fit with policy	
	Negative strategic fit with policy	
Policy	**Key Extracts**	**Strategic Fit**
National Policy		
Levelling Up the United Kingdom 2022	The Levelling Up White Paper was published in February 2022 by the Department for Levelling Up, Housing and Communities. The document sets out that levelling up is a moral, social and economic programme for the whole Government. The White Paper outlines how the Government seeks to spread opportunity more equally and end geographic inequality across the UK. The White Paper details that it is vital that we preserve and enhance the economic, academic and cultural success stories of the UK's most productive counties, towns and cities. But it is equally critical that we improve productivity, boost economic growth, encourage innovation, create good jobs, enhance education attainment and renovate the social and cultural fabric of those parts of the UK that have stalled and not shared equally in the UK's success. The White Paper sets out that levelling up requires a focused, long-term plan of action and a clear framework to identify and act upon the drivers of spatial disparity. Evidence from a range of disciplines outlines these drivers can be summarised in six 'capitals', namely: ▪ **Physical capital - Infrastructure, machines and housing;** ▪ **Human capital - The skills, health and experience of the workforce;** ▪ **Intangible capital - Innovation, ideas and patents** ▪ **Financial capital - Resources supporting the financing of companies;** ▪ **Social capital - The strength of communities, relationships, and trust; and** ▪ **Institutional capital - Local leadership, capacity and capability.** The NEMMDR would allow for the population of Melton Mowbray to benefit from a reduction in traffic within the town centre, as well as catering for the planned growth of the town.	

Bus Back Better 2021	Bus Back Better outlines the Government's ambition to transform the UK's bus offer, making buses as a practical and attractive alternative to the car for people through improvements in reliability, frequency and accessibility. This is particularly important following the COVID-19 pandemic, where bus use has dropped significantly and continues to be lower than pre-COVID levels. The NEMMDR scheme will allow for improvements to journey time reliability as well as allowing for quicker journey times within Melton Mowbray, through improving to town centre traffic conditions, and reducing the delays currently faced by the operating bus services.	
National Planning Policy Framework 2021	The revised National Planning Policy Framework (NPPF) was published in July 2021 and sets out the Government's planning policies for England and how these are expected be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. The NEMMDR scheme is aligned with many of the objectives of the NPPF, including: ▪ **An Economic Objective** - To help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure. ▪ **A Social Objective** - To support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being. ▪ **Building a strong competitive economy** - Planning policies and decisions should help create the conditions in which businesses can invest, expand, and adapt. Significant weight should be placed on the need to support economic growth and productivity, taking into account both local business needs and wider opportunities for development. ▪ **Promoting healthy and safe communities** - Planning policies and decisions should aim to achieve healthy, inclusive and safe places which: promote social interaction; are safe and accessible; and enable and support healthy lifestyles.	
Transport Decarbonisation Plan 2021	The Transport Decarbonisation Plan sets out the Government's commitments and the actions needed to decarbonise the entire transport system in the UK. The plan follows on from 'Decarbonising transport: Setting the challenge' published in March 2020. The Decarbonisation Plan sets out that decarbonisation is not about stopping people doing things, it's about doing the same things differently, through improved efficiency and zero emission vehicles. A summary of commitments to decarbonising all forms of transport included in the plan are listed below: ▪ Increasing cycling and walking; ▪ Zero emission buses and coaches;	

	▪ Decarbonising our railways; ▪ A zero emission fleet of cars, vans, motorcycles and scooters; ▪ Accelerating maritime and aviation decarbonisation; ▪ Delivering a zero emission freight and logistics sector; ▪ Delivering decarbonisation through places; ▪ Maximising the benefits of sustainable low carbon fuels; ▪ Hydrogen's role in a decarbonised transport system; ▪ Future transport – more choice, better efficiency; and ▪ Supporting UK research and development as a decarbonisation enabler. The NEMMDR will allow for a redirection of through traffic through the town of Melton Mowbray, therefore allowing the prioritisation of active mode facilities and supporting future transport initiatives.	
Gear Change: a bold vision for cycling and walking 2020	The Government's vision for cycling and walking is outlined in Gear Change, emphasising the need to increase walking and cycling journeys by millions each year. The plan accompanies £2 billion funding commitment to active travel infrastructure across the country and aims to achieve the vision of transforming England's transport system into 'a great walking and cycling nation'. The NEMMDR will allow for a redirection of through traffic through the town of Melton Mowbray, allowing the prioritisation and support of active mode initiatives.	
National Infrastructure Strategy 2020	The National Infrastructure Strategy outlines plans to transform the UK's infrastructure networks. It is based around three overarching subject matters: ▪ Levelling up – boosting growth and productivity by investing in rural areas, towns and cities through major national projects or local priorities ▪ Carbon Net Zero emissions by 2050 – to put the UK on path to meeting its net zero emissions target by transforming infrastructure to decarbonise the UK's power, heat and transport networks ▪ Supportive private investment – to attract private investment into infrastructure, by providing clarity on Government plans to increase certainty for investors, so they can help deliver the upgrades and projects needed across the country Accelerate and improve delivery of infrastructure projects – reforming and speeding up the planning system, and improving the way projects are chosen, procured and delivered The National Infrastructure Strategy shares the National Infrastructure Commission's ambitions for Levelling Up towns and cities outside of London. Improved transport links will allow cities and towns to 'act as an anchor' for growth across a region, enabling the rebalancing of the economy through infrastructure. It is acknowledged that 50% of the UK population live in towns, many of which have suffered from economic and social decline over the decades. The Government therefore plans to invest in infrastructure to revitalise towns like Kettering and Wellingborough, which will drive their economic regeneration. The Strategy sets out that infrastructure, including transport, underpins the economy as they are vital for jobs, businesses and	

	economic growth; as such, the Government wants to deliver an infrastructure revolution to radically improve the UK's infrastructure. The NEMMDR will allow for an improvement in access to Melton Mowbray, enabling its full growth potential and wider connectively. A portion of the scheme is also being funded by private sector developers, in turn supporting one of the overarching objectives of the strategy of leveraging such investment into infrastructure projects.	
Transport Investment Strategy 2017	The Government's Transport Investment Strategy seeks to use transport investment to achieve the following objectives: 'create a more reliable, less congested, and better-connected transport network that works for the users who rely on it.' 'enhance our global competitiveness by making Britain a more attractive place to trade and invest.' 'Support the creation of new housing.' This scheme complements these goals because it seeks to reduce traffic congestion in and around Melton Mowbray, promote the regeneration of employment areas and attract new employment investment, and enable, support and accelerate housing growth sites. The new road will improve journey time and journey time reliability for all users of the highway network in and around Melton and make the town a more attractive location for investment. The focused goals of this scheme are in line with the Strategy's commitment to schemes which **'take clearly defined problems or unlock specific opportunities.'** The Strategy reaffirms the Government's commitments to working with sub-national bodies to developing transport investment plans for local areas. This scheme is promoted by Leicestershire County Council and aligns with the Midlands Connect Transport Strategy (see below). The Transport Investment Strategy is informed by 'A Major Road Network for England', a document produced by the Rees Jeffreys Road Fund, which explains the importance of the **Major Road Network (MRN)** which will be the subject of public consultation in Autumn 2017. The MRN comprises 3,800 miles of local authority A-roads, which do not fall under Highway England's Strategic Road Network. The MRN plays a significant role in supporting regional economies and national economic growth and it services a range of users and the wider public interest. As a result, it requires consistent planning, management and funding. In addition, Melton is at a key strategic intersection of various major A roads, including the A606 and A607 which form part of the Major Road Network. These facts speak to the importance of both routes in terms of their role in delivering economically important connectivity, and that the NEMMDR will support the direct connectivity between.	
Industrial Strategy Green Paper 2017	The Industrial Strategy Green Paper seeks views on the Government's proposals **'to improve living standards and economic growth by increasing productivity and driving growth across the whole country.'** This high level goal is consistent with	

	the broad objective of this scheme which will foster economic growth in Melton by enable, support and accelerate the delivery of homes and jobs, attracting inward investment and improving accessibility to key employment locations. It does so in a region where GVA per capita is below the UK average, which helps to address the imbalance in the national economy. The scheme also supports three key pillars of the proposed Strategy: 'Upgrading infrastructure.' 'Supporting businesses to start and grow.' 'Driving growth across the whole country.' As part of the emerging Industrial Strategy, the Government will produce a **25 Year Plan for Food, Farming and Fisheries**. Given Melton hosts nationally and internationally significant food manufacturing industry, the ability of the town to support future growth in this sector will help to deliver the goals of this 25 Year Plan.	
Housing White Paper 2017	The Housing White Paper sets out the Government's plans to increase the scale and pace of housebuilding to ensure that sufficient homes built in the right places to meet people's needs and aspirations. This scheme is in line with this ambition because it will facilitate the delivery of 6,125 new houses. It also supports the White Paper's commitment to ensuring infrastructure is provided **'in the right place at the right time'** to ensure housing development is not stalled.	
The air quality strategy for England, Scotland, Wales and Northern Ireland	This Air Quality Strategy sets out air quality objectives and policy options to further improve air quality in the UK from today into the long term. As well as direct benefits to public health, these options are intended to provide important benefits to quality of life and help to protect our environment The scheme will remove traffic from a significant number of residential and business receptors, and thus provide an overall net benefit in terms of air quality and exposure to pollutants. This is especially in the town centre - where pedestrian activity and pollutant exposure is also strongest.	
Sub National Policy		
Midlands Connect Strategic Transport Plan 2022	There are three main ambitions of the strategic transport plan, namely, to make the Midlands region: ▪ **Fairer** – Levelling-up and strengthening the region and UK. ▪ **Greener** – Decarbonising transport and adapting to climate change. ▪ **Stronger** – Driving resilient economic growth. To achieve this, three distinct priorities have been identified, one of which being road, and includes the need to: "Assist local councils to develop business cases for targeted investments on the major road network, particularly those that improve traffic flow and encourage integration with public transport and active travel modes such as walking and cycling."	

	The NEMMDR will allow for a redirection of through traffic through the town of Melton Mowbray, improving traffic flow within the town and therefore allowing the prioritisation of active mode facilities and supporting future transport initiatives.	
Midlands Engine Prospectus 2016	In seeking to foster growth and boosting productivity in Melton, the scheme is in line with the vision in the Prospectus for 'powering up' the Midlands Engine: 'We will focus on driving the productivity of our existing key sectors, through business investment, research and development, innovation, skills and connectivity improvements.' The Prospectus set out the high-level objectives of the emerging Midlands Connect Transport Strategy. By alleviating congestion and improving journey time reliability on key routes within and around Melton, the scheme is consistent with three of the issues to be addressed by the Strategy: 'A long-term solution to the congestion and unreliability of movements within and through the region.' 'Reduced journey times and improved reliability between key centres.' 'Addressing the interaction of national, regional and local movements within key strategic transport hubs in the Midlands.' By supporting the growth of food and drink manufacturing and production businesses in Melton, the scheme supports a key ambition in the Prospectus for this sector to expand and innovate: 'The Midlands Engine's food and drink sector will evolve as the UK's larder.' '[We] are ideally placed to improve productivity across the food cycle, from farm to fork.'	
Local Policy		
Leicestershire Cycling and Walking Strategy (CaWS) 2021	The CaWS sets out the Vision for Leicestershire to become a county where walking and cycling are safe, accessible and obvious choices for short journeys and a natural part of longer journeys, helping to deliver healthier, greener communities. To achieve this, three core objectives have been identified: ▪ To **enhance the infrastructure that supports cycling and walking** in Leicestershire by upgrading existing and providing high quality new segregated infrastructure, cycle parking, pedestrian crossings and traffic reduction measures to create healthy streets and spaces. ▪ To **enable people to cycle and walk** in Leicestershire by providing cycle training, working with schools and workplaces to provide people with the required skills and information. ▪ To **inspire a step change in cycling and walking** in Leicestershire by targeted promotion, engagement and encouragement to instil confidence so that people choose to walk and cycle more.	

	The NEMMDR scheme includes a 3m wide combined cycle and footway along almost all its length, providing clear enhancement in infrastructure for both cycling and walking. As a secondary result of the NEMMDR, the scheme will allow for a redirection of through traffic through the town of Melton Mowbray, ultimately improving traffic flow within the town creating a safer environment for cycling and walking.	
Bus Service Improvement Plan (BSIP) 2021	The overall aim of the Leicestershire BSIP is to increase bus usage (compared with pre-pandemic levels) across the county through improved, financially sustainable, higher standard services that better meet the needs of Leicestershire residents, employees, and visitors – making bus travel a preferred choice for travel around the county. The NEMMDR scheme will allow for improvements to journey time reliability as well as allowing for quicker journey times within Melton Mowbray, through improving to town centre traffic conditions, and reducing the delays currently faced by the operating bus services.	
Leicester and Leicestershire Working Together Strategic Transport Priorities 2020 - 2050	The Working Together Strategic Transport Priorities specifically includes the town of Melton Mowbray as an identified area for future development, with reference to prioritising **"Melton Mowbray centre for regeneration and growth"**. It also includes specific reference to the NEMMDR, with the scheme being included as "needed to unlock land for development and accommodate new growth focussed on major transport corridors" and reference that "investment in a new outer distributor road for Melton Mowbray, as part of a wider Melton Mowbray Transport Strategy that enables the delivery of substantial numbers of new homes".	
Interim Melton Mowbray Transport Strategy (MMTS) 2021	One of the key elements of the interim Melton Mowbray Transport Strategy is the proposed NEMMDR. The need for the NEMMDR is included as requirement to form part of a wider package of measures to help address the town's existing traffic problems, support the growth of the town and to achieve wider objectives, including environmental improvements. The interim MMTS provides a clear framework for putting in place complimentary measures for the NEMMDR, building on benefits the scheme will presented within the town itself. The key areas of focus for the development of the full MMTS include: ▪ Proposals for improving the walking and cycling network; ▪ The possibility of a 'bus hub' - a type of mini-station - to support passenger transport provision; ▪ Possible changes to town centre roads to increase public space and improve walking and cycling facilities and; ▪ Working with other parties to achieve improvements to the town's rail services. The full MMTS will be submitted alongside the NEMMDR FBC to demonstrate the opportunities created by the scheme for wider transport improvements within the town, and the commitment to delivering such. It will also include a framework for the delivery any	

	early priority measures, including those measures that should be delivered to complement the scheme.	
Network Management Policy and Strategy	The Network Management Policy and Strategy notes the inclusion of the need to facilitate major road infrastructure delivered by Leicestershire County Council including the NEMMDR. It also includes reference to undertaking network management duty to provide the necessary time and space on the road network to support the safe and efficient implementation of major works to the network and the services running underneath it.	
Prospectus for Growth Leicestershire 2019	Includes reference to the Melton Mowbray Transport Strategy and Melton Mowbray as a key centre for regeneration and growth, with specific reference the NEMMDR scheme and its benefit for up to 6,125 new homes and 3,400 new jobs by 2036.	
Leicestershire Local Transport Plan 3: 2011-2026	By promoting the growth of the manufacturing section in Melton, the scheme will support the following strategic goal in LTP3: 'Goal 1: A transport system that supports a prosperous economy and provides successfully for population growth.' By enabling public realm improvements in Melton Mowbray town centre, the scheme will support the following strategic goal in LTP3: 'Goal 6: A transport system that helps to improve the quality of life for our residents and makes Leicestershire a more attractive place to live, work and visit.' By alleviating congestion and increasing journey time reliability, the scheme will also help to deliver the following strategic outcomes: 'Our transport system provides more consistent, predictable and reliable journey times for the movement of people and goods.' 'There is improved satisfaction with the transport system amongst both users and residents.'	
Leicester and Leicestershire Food and Drink Growth Plan, 2015	The scheme helps to enable, support and accelerate growth and modernisation in the food and drink manufacturing sector in Melton by providing more reliable and faster links to the strategic road network. This is in line with the Plan, which explains that **'transport and connectivity are also important issues affecting the growth potential of businesses in the sector.'** The scheme will enable, support and accelerate news sites for the future expansion of businesses in this sector. This is in line with the Plan which describes how a **'perceived lack of food grade premises and supporting services'** is an important issue for these businesses.	
Leicester and Leicestershire Strategic Growth Plan	The Strategic Growth Plan is emerging and will provide an approach for the development of Leicester and Leicestershire up to 2050. The first stage, the 'Strategic Growth statement' was agreed by all partner authorities (the 7 district councils, Leicester City Council and Leicestershire County Council) in 2016 which includes objectives for the Plan as: ▪ **We will provide a deliverable supply of land for housing**, providing high quality homes, reflecting local styles and	

	distinctiveness, in a range of types, sizes and tenures suited to local needs. ▪ We will strengthen the economic base and maintain its diversity by providing a range of employment sites that respond to the needs of industry ▪ **We will maximise the potential of our transportation corridors** to deliver sustainable development and enable the creation of an integrated public transport network ▪ We will support the City of Leicester, Loughborough, Hinckley and the other market towns across the County as accessible business, service and cultural centres ▪ We will focus on the importance of communities, ensuring that place-making delivers high quality development which supports the needs of both existing and new communities. Stage two of the Strategic Growth Plan identifies the approach to growth following these priorities. This has recently been published for consultation, and reinforces the role of Melton Mowbray as a focal point of its Borough and a future, and on-going Growth Point in its own right. The Strategic Growth Plan identifies a further 2,000 dwellings in Melton Mowbray (up to 3,647 in the Borough) through to 2050, that will also be supported by the NEMMDR scheme.	

2.14 EXPECTED IMPACTS OF THE PROPOSED SCHEME

TRAFFIC AND CONGESTION

2.14.1. To demonstrate the impact of the scheme on the existing issues articulated in Section 2.3, modelling work has been undertaken comparing the do minimum (without the NEMMDR) with the do something (with NEMMDR 2024) the results are outlined in the following section.

LEVELS OF CONGESTION

2.14.2. The forecasting of the impact of the scheme shows a significant reduction in traffic on the east side of the town centre gyratory including Burton Street and Thorpe Road approaches, although given the wider extent of from which traffic is reassigned, rat run routes through the town centre avoiding the Thorpe End / Norman Way junction are also relieved. There is a small reduction in traffic on Station Lane between A6006 Asfordby Road and A607 Leicester Road.

2.14.3. Figure 2-27 shows the changes in volume-capacity ratio with the scheme in place in the AM peak in 2040. The pattern in the PM peak is almost identical, as shown in Figure 2-28.

2.14.4. With the scheme in place, the majority of roads within the town centre see at least a 10%-25% reduction in the volume to capacity ratio, meaning that these roads will be less congested, with some roads including Thorpe Road and Burton Street seeing a reduction of over 25%.

2.14.5. Alongside a general reduction in congestion, the scheme will enable a reduction in town centre junction delays as well as through traffic, which currently pose significant issues within the town as discussed in Section 2.3.

Figure 2-27 - NEMMDR Forecast Volume-Capacity Ratio Changes 2040 AM Peak

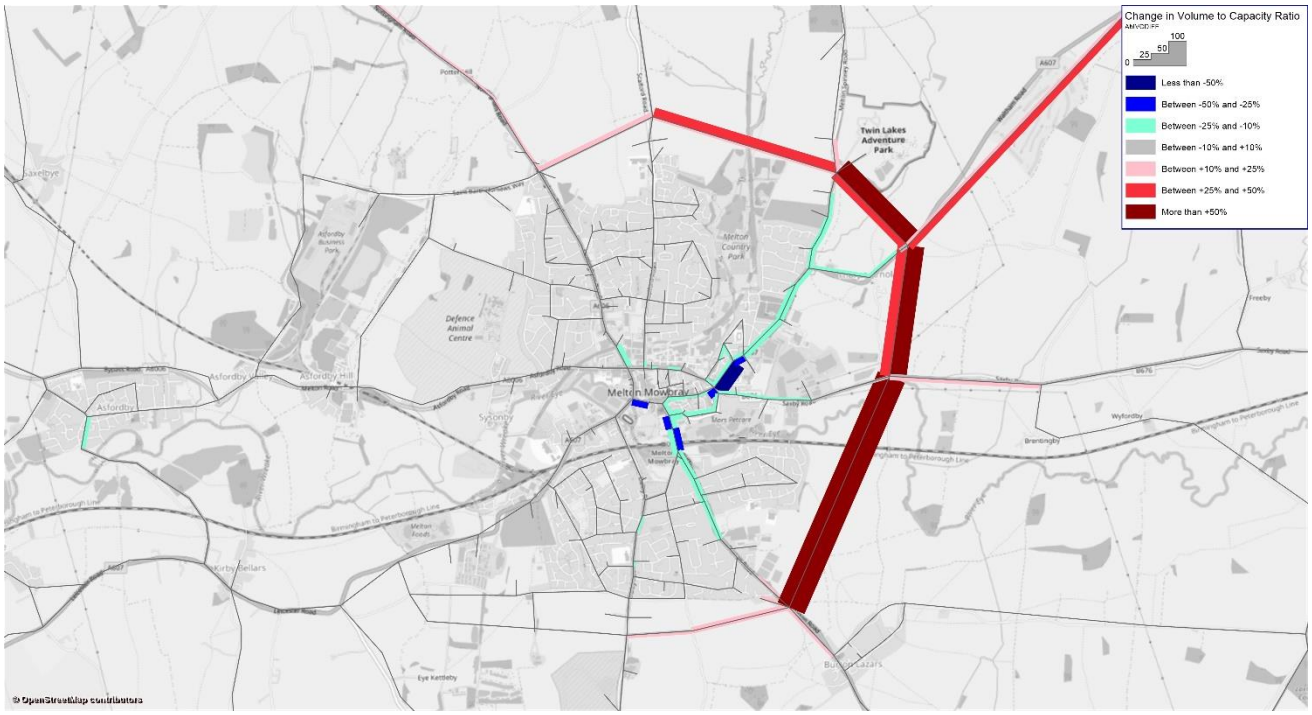


Figure 2-28 - NEMMDR Forecast Volume-Capacity Ratio Changes 2040 PM Peak

HGV MOVEMENTS

2.14.6. The forecast impacts of the scheme also include a significant reduction in HGV movements within the town centre, with most of these journeys rerouted onto the NEMMDR in the 2040 forecast year.

2.14.7. Table 2-14 shows the comparison of forecast average annual daily HGV traffic for 2040, with and without the scheme in place. On average, there is a reduction of 49% in average annual daily HGV traffic with the scheme in place. On some roads, almost all HGV traffic is forecast to be removed, including on along the A607 north and southbound.

Table 2-14 - Forecast Average Annual Daily HGV Traffic Changes 2040

Location		2040		
Road	**Direction**	**With-Out Scheme**	**With Scheme**	**% Change**
A6006 EB	East Bound	282	258	-8%
A6006 WB	West Bound	269	230	-14%
A606 NB	North Bound	228	202	-11%
A606 SB	South Bound	174	91	-48%
Norman Way EB	East Bound	319	85	-73%
Norman Way WB	West Bound	38	13	-65%
A607 NB	North Bound	124	0	-100%
A607 SB	South Bound	144	13	-91%
B676 EB	East Bound	249	74	-70%
B676 WB	West Bound	65	9	-86%
Sherrard St EB	East Bound	0	0	0%
Sherrard St WB	West Bound	129	23	-82%
A606 SB	South Bound	23	8	-64%
A606 NB	North Bound	470	330	-30%
Leicester St WB	West Bound	491	343	-30%
A607 SB	South Bound	587	333	-43%
A607 NB	North Bound	345	147	-57%
Wilton Road NB	North Bound	670	432	-36%
Wilton Road SB	South Bound	339	254	-25%

ROAD SAFETY

2.14.8. As detailed in the Economic Case, the COBALT analysis indicates that the scheme is expected to generate a disbenefit of £4.1m over a 60-year appraisal period. Table 2-15 provides a breakdown of the number of additional accidents, and expected severity, which lead to this disbenefit.

Table 2-15 - Summary of Accident Assessment

Severity	Additional Accidents
Fatal	3.8
Serious	13.1
Slight	45.0

2.14.9. It is important to note however, that there are strong Distributional Impacts associated to the accident pattern, the vulnerable group with the highest observed casualty rate is pedestrians and the scheme has the largest positive impact for that group as a whole, as well as for child and older pedestrians. Similarly, cyclists also have a number of beneficial impacts.

ACTIVE MODE USER IMPACTS

2.14.10. An active mode appraisal, as set out in the Economic Case, was undertaken using the DfT Active Mode Appraisal Toolkit (AMAT) to assess the impact that the inclusion of a combined cycle and footway along almost all the scheme's length will offer.

2.14.11. A number of benefit scenario options were tested, including the impact of proposed complimentary measures proposed in the MMTS, which are dependent on the NEMMDR. The Economic Case provides an overview of the different scenarios and additional benefits of each.

2.14.12. The elasticity methodology was considered to provide the most robust appraisal, and hence the PVB of £0.43m is included in the main benefits of the scheme, from an increase of 2.95% in demand.

JOURNEY TIME RELIABILITY

2.14.13. Analysis of the impact of the NEMMDR on journey time reliability around the Melton Mowbray urban area was undertaken utilising the transport users benefit appraisal (TUBA). The outcome indicated that the scheme would produce a reliability benefit of £5.41m in 2010 prices and values for highway users.

PUBLIC TRANSPORT

2.14.14. Whilst the NEMMDR scheme doesn't directly provide dedicated public transport infrastructure, the reduction in traffic and congestion that the scheme will provide in Melton Mowbray Town Centre will allow for enhancement public transport services in the town.

2.14.15. With a reduction in through traffic as demonstrated above, public transport services will be able to benefit directly with journey times likely to decrease and journey reliability increasing.

2.14.16. These benefits will unlock complimentary measures, looking to be implemented through the MMTS, with a focus of building on benefits the scheme will present for public transport in areas including the possibility of a 'bus hub' to support passenger transport provision as well as looking to improve the town's rail services.

2.14.17. As the MMTS is currently only at an interim phase, the detailed proposals for public transport improvements are still being developed alongside the assessment for funding, however the full MMTS will build on the benefits of the NEMMDR through assessing proposals that:

- Benefit from the reduction in congestion-related delays/unreliability to bus services within the town and improve access to the railway station and main bus interchange within the town centre.
- Transform passenger transport services and infrastructure, whilst identifying a financially sustainable long-term approach to passenger transport provision within the town.
- Provide a comprehensive, holistic approach to improving walking, cycling and passenger transport links between the town centre (or other key services/facilities within the town) and planned growth areas.
- Explore the use of any promotional and behaviour change initiatives/programmes.

2.14.18. The NEMMDR will also assist with the implementation of Leicestershire County Council's National Bus Strategy Bus Service Improvement Plan which aims to improve journey times and the reliability of journey times.

2.15 ACHIEVEMENTS OF OBJECTIVES

2.15.1. The table below sets out how NEMMDR will achieve its stated objectives:

Table 2-16 - Achievement of Objectives

Objectives	Achieved	Rationale
Improve access to Melton Mowbray town centre enabling full growth potential: To improve accessibility to jobs and retail centre via significantly reducing current severe levels of congestion and journey time unreliability in the peaks.	✓ Yes	▪ Figure 2-27 and Figure 2-28 show that the NEMMDR allows for the majority of roads within the town centre see at least a 10%-25% reduction in the volume to capacity ratio, alluding that these roads will be less congested. ▪ The reduction in congestion will in turn lead to an improvement in journey time reliability.
Reduce congestion on the local network, in particular key pinch points in and around Melton Mowbray town centre: To divert the through traffic away from the town centre onto more suitable roads and therefore to improve the vitality and viability of the town centre	✓ Yes	▪ Figure 2-27 and Figure 2-28 show that the NEMMDR allows for the majority of roads within the town centre see at least a 10%-25% reduction in the volume to capacity ratio, alluding that these roads will be less congested. ▪ This also indicates a decrease in junction delays within the town centre, this also suggesting that journeys will be diverted onto the NEMMDR rather than through the town and in turn improve the vitality and viability of the town centre.
Reduce impact on rat-run routes via improving the south-north connectivity	✓ Yes	▪ Figure 2-27 and Figure 2-28 show that the NEMMDR allows for the majority of roads within the town centre see at least a 10%-25% reduction in the volume to capacity ratio, alluding that these roads will be less congested. ▪ This indicates that drivers will make use of the NEMMDR rather than rat-run routes within the town, enabling south-north connectivity improvement.
Remove HGV and LGV through traffic in Melton Mowbray town centre.	✓ Yes	▪ Table 2-14 shows the forecast decrease in average annual daily HGV with the NEMMDR in 2040. On average, HGV through traffic will decrease by nearly 50%.

Improve access to the areas of potential development in the Local Plan.	✓ Yes	▪ The NEMMDR allows easier and multiple access to multiple land parcels associated with the Northern Sustainable Neighbourhood in particular, and that is the transport-led mechanism for enabling and sustaining an accelerated development profile from 2022 onwards. ▪ The NEMMDR will also provide a link to the NEMMDR Southern Link at the A606 which will lead to a further reduction in through traffic in Melton Mowbray, bringing additional benefits through an increased reduction in congestion on the local network and supporting housing delivery, with the A607 through the town reclassified.
Promote a quality space in the town centre, suitable for non-transport uses and attractive to inward investment.	✓ Yes	▪ The scheme provides opportunity within the town centre for reallocation of road space to active modes, public transport and/or urban realm enhancements.
Increase levels of public transport, walking and cycling use within the Study Area.	✓ Yes	▪ Further to the above opportunities in the town centre, the scheme provides active mode facilities to encourage walking and cycling
Improve highway safety for all road users within the Study Area.	✓ Yes	▪ The scheme a large positive impact for pedestrians, including for child and older pedestrians. Similarly, cyclists also have a number of beneficial impacts.

3

ECONOMIC CASE

3 ECONOMIC CASE

3.1 BACKGROUND

3.1.1. The Economic Case assesses the impacts of the preferred scheme, and the resulting value for money, to fulfil HM Treasury's requirements for appraisal and to demonstrate value for money in the use of taxpayers' money.

3.1.2. 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 that 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.

3.1.3. This Economic Case summarises the North and East Melton Mowbray Distributor Road (NEMMDR) scheme appraisal. More detail is provided in the Economic Appraisal Report which contains full details of the assumptions, methodology and results from the scheme appraisal, which can be found in Appendix D.

3.2 OVERVIEW OF TRANSPORT MODELLING METHODOLOGY

3.2.1. The appraisal of the scheme is based on detailed modelling of the travel patterns in and around Melton Mowbray, with forecasts of traffic produced for both the do-minimum (without scheme) and do-something (with scheme) cases.

3.2.2. The model used to support the scheme appraisal is the Leicester and Leicestershire Integrated Transport Model (LLITM 2014 Base). This suite of models was commissioned by Leicestershire County Council (LCC) and includes highway and public transport assignment models and a variable demand model. LLITM has been developed in accordance with TAG advice and a scheme specific Local Model Validation Report has been produced to demonstrate fitness for purpose of the model (this can be found in Appendix D).

3.2.3. The forecasting assumptions and processes together with the results from the forecast models used in the scheme appraisal are all included as part of the Modelling and Appraisal Documents in Appendix D.

3.3 OVERVIEW OF ECONOMIC APPRAISAL METHODOLOGY

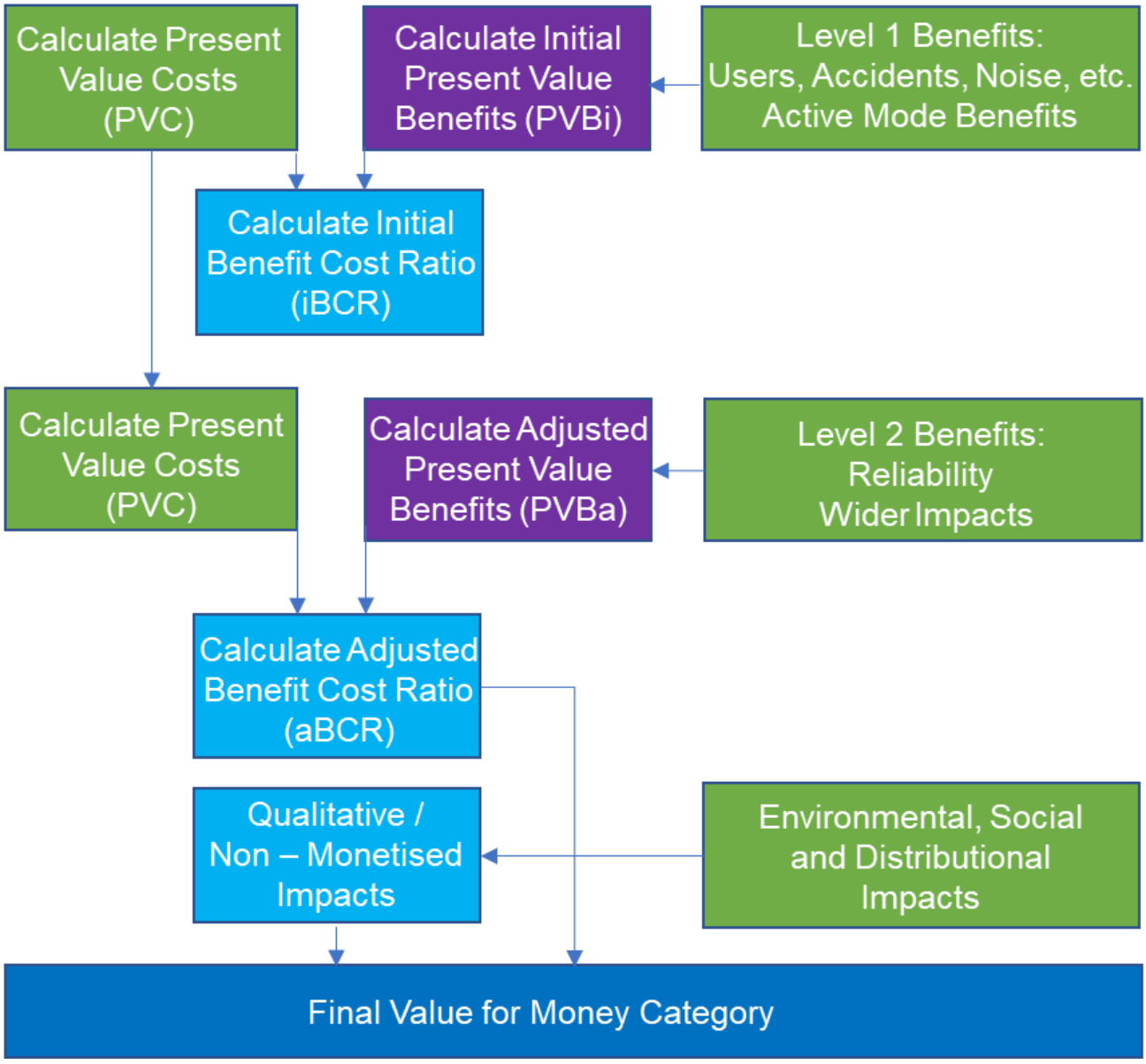
3.3.1. The Value for Money assessment is a staged process that includes appraisal of the scheme's economic, environmental, social, distributional and fiscal impacts using qualitative, quantitative and monetised information.

3.3.2. The assessment starts with analysis of monetised costs and benefits that are well established (level 1) with calculation of the initial Benefit Cost Ratio (BCR) of the scheme. An adjusted BCR is then calculated by adding the monetised benefits from those aspects with lower levels of assurance (level 2 benefits), including, in this case, wider economic benefits and journey time reliability. The next stage is to capture and analyse those impacts which cannot be monetised but can be presented as qualitative information (or can only be monetised in an indicative way). Finally, analysis is carried out to identify how the impacts of the scheme are distributed across different groups within society.

3.3.3. The full methodology for the economic appraisal is presented in the Economic Appraisal Report (Appendix D).

3.3.4. The economic appraisal has been undertaken in line with the guidance provided in TAG. The methodology for assessing the Value for Money of the scheme uses the DfT Value for Money Framework and is illustrated in Figure 3-1.

Figure 3-1 - Value for Money Framework



3.3.5. The appraisal methods used to assess each scheme impact are summarised in Table 3-1. It should be noted that several of the assessments have remained unchanged from the Outline Business Case (OBC) stage, as identified in the Appraisal Specification Report (ASR) found in Appendix F.

Table 3-1 - Summary of Appraisal Methodology

Impacts	Sub-Impacts	Appraisal Methodology	Appraisal Output
Economy	Business Users & Transport Providers	TUBA assessment of travel times and Vehicle Operating Cost (VOC) benefits TUBA assessment of construction delay benefits	Quantitative/Monetised/ Distributional
	Reliability Impact on Business Users	TAG assessment.	Quantitative/Monetised
	Regeneration	Not applicable – assessment of Wider Economic Impacts has been undertaken as per the below	N/A
	Wider Impacts	Assessment of agglomeration, output change in imperfectly competitive markets, and labour supply impacts using DfT's WITA tool	Quantitative/Monetised
Environment	Noise	TAG Noise workbook (unchanged from OBC)	Quantitative/Monetised/ Distributional
	Air Quality	TAG Local Air Quality Workbook/ Air Quality Valuation Workbook (unchanged from OBC)	Quantitative/Monetised/ Distributional
	Greenhouse Gases	TUBA output	Quantitative/Monetised
	Landscape	TAG Landscape Worksheet (unchanged from OBC)	Qualitative
	Townscape	TAG Townscape Worksheet (unchanged from OBC)	Qualitative
	Historic Environment	TAG Historic Environment Worksheet (unchanged from OBC)	Qualitative
	Biodiversity	TAG Biodiversity Worksheet (unchanged from OBC)	Qualitative
	Water Environment	TAG Water Environment Worksheet (unchanged from OBC)	Qualitative
Social	Commuting and Other Users	TUBA assessment of travel times and Vehicle Operating Cost (VOC) benefits. TUBA assessment of construction delay benefits	Quantitative/Monetised/ Distributional
	Reliability Impact on Commuting and Other Users	TAG assessment	Quantitative/Monetised/ Qualitative
	Physical Activity	AMAT assessment	Quantitative/Monetised/
	Journey Quality	AMAT assessment	Quantitative/Monetised/
	Accidents	COBALT analysis for links where there is a significant change in traffic flow as a result of the scheme.	Quantitative/Monetised/ Distributional
	Security	Not applicable – scheme is not expected to impact on security	N/A
	Accessibility	Not applicable – scheme is not expected to impact on accessibility	N/A

	Affordability	Affordability benefits as a function of change in VOC for DI analysis	Qualitative/Distributional
	Severance	Change in severance as a result of the scheme. (unchanged from OBC)	Qualitative/Distributional
	Option Values	Not applicable – scheme is not expected to substantially change the availability of transport services in the study area	N/A
Public Accounts	Cost to Broad Transport Budget	Scheme cost including Optimism Bias and inflation adjustment	Quantitative
	Indirect Tax Revenues	Calculated within TUBA	Quantitative

3.4 KEY ASSUMPTIONS IN THE SCHEME APPRAISAL

3.4.1. The appraisal of the scheme has been based on a central case (or Core Scenario) from LLITM, with use of a locally specific and up-to-date uncertainty log, as defined by TAG, and detailed in the Forecasting Report (Appendix D).

3.4.2. Scheme costs have considered inflation, on-going future maintenance costs and scheme monitoring and evaluation costs. The level of optimism bias applied is 20% in line with TAG advice for highway schemes at the Full Business Case (FBC) stage.

3.4.3. In all BCRs produced, developer contributions are accounted for within the benefits and costs, considering the likely profile of this source of funding.

3.4.4. Future discounted do-minimum costs for the North Link Road are also included to be consistent with its inclusion in the future year do-minimum modelling.

3.4.5. The standard economics file within TUBA v1.9.17 has been amended to be consistent with the LLITM user classes. Single categories have been created for LGV and HGV based on DfT and TAG vehicle and purpose splits.

3.4.6. The modelled periods within LLITM 2014 have been factored to estimate the annual benefits expected for the weekday period of 07:00 to 19:00 utilising local traffic flow and travel purpose data to assign relevant demand and costs. The off peak and weekend periods have also been included in the appraisal, utilising the inter-peak demand and costs.

3.4.7. The appraisal of benefits has included changes in travel costs from the traffic modelling as follows:

- all movements to / from Melton Borough have been included in the assessment; and
- for non-Melton Borough movements, only those which may pass through the Area of Influence of the scheme (such as Leicester City to / from Lincolnshire) have been included.

3.4.8. In line with TAG advice, a 60-year appraisal period has been adopted, with no growth in traffic assumed beyond the final modelled year.

3.4.9. Sensitivity tests are presented to demonstrate the robustness of the Economic Case under alternative traffic growth and network assumptions.

3.5 SCHEME COSTS

3.5.1. This section details the costs of construction and maintenance of the NEMMDR as used in the economic assessment. It also details the assumed developer contributions. In undertaking the assessment of costs, it is important to note that the Northern Link Road (Nottingham Road to Melton Spinney Road) is included in the do-minimum, although it is built at a later date than in the do-something, opening in 2040 rather than 2025.

CONSTRUCTION COSTS

3.5.2. The construction costs of the full NEMMDR have been estimated for land, construction and preparation costs over the financial years from 2018/19 to 2025/26. These costs have been provided in factor costs, based on 2022 prices. Inflation assumptions are based on the Building Cost Information Service (BCIS) latest forecasts, with real inflation included in the appraisal costs as the difference between the BCIS forecasts and the GDP deflator. The summary of scheme construction costs and profile is shown in Table 3-2 (noting costs incurred before October 2022 are excluded as they are sunk costs).

Table 3-2 - Summary of Construction Costs, (2022 factor costs, including inflation)

Year	Cost (£000)
2022	5,128
2023	35,489
2024	40,651
2025	16,880
Total	**98,148**

ESTIMATING UNCERTAINTY

3.5.3. When calculating uncertainty in scheme costs, it can be split into two elements namely:

- Adjustment for **Risk** – generally quantified using a Quantified Risk Assessment (QRA).
- Adjustment for **Optimism Bias** – generally quantified using TAG guidance.

3.5.4. A Quantified Risk Assessment (QRA) has been undertaken, resulting in a risk estimate that is 6.1% of the scheme costs. As defined in TAG Unit A1.2, an optimism bias of 20% should be used based at Stage 3 (FBC) for highway scheme, this has been applied as it is more conservative than the currently calculated QRA value. The optimism bias value included in 2022 prices is £19.63m.

PRESENT VALUE OF COSTS (CONSTRUCTION)

3.5.5. The construction costs, including optimism bias, have been converted to 2010 prices and discounted to 2010 values for the purposes of economic appraisal. The total construction cost is £66.2m in 2010 prices discounted to 2010.

MAINTENANCE COSTS AND PROFILE AND MONITORING AND EVALUATION COSTS

3.5.6. The maintenance costs of the scheme are based on data from the COBA manual. Using Table 9.1 of the manual, capital costs of maintenance for the scheme have been assumed to be £7,400 per

kilometre in 2002 prices. The length of the scheme is circa 7km and using GDP inflation assumptions this results in maintenance costs of approximately £80,500 per annum in 2022 prices. In line with guidance, maintenance is assumed to commence in 2026 and continue annually until the end of the appraisal period in 2084.

3.5.7. For monitoring and evaluation, a cost of £240,000 (in 2022 factor prices) is included. This equates to a spend of about £50,000 in each year from 2023 (first year of construction) to 2026 (one year after opening) and a further £50,000 spent in the fifth year after opening (2030). These costs have been converted to market prices, and inflation of 2.1% per annum has been assumed.

3.5.8. Both the monitoring and evaluation, and the maintenance costs have been converted to 2010 prices and values, including optimism bias of 20%, to provide the following estimates for the economic appraisal:

- Monitoring and Evaluation: £0.165m
- Scheme Operational Costs: £1.989m (approximately 3% of the scheme construction costs)

PRESENT VALUE OF COST (PVC)

3.5.9. The total discounted and deflated present value of cost (PVC) for the scheme is **£68.3m** (whole life costs).

DEVELOPER CONTRIBUTIONS

3.5.10. Developer contributions towards NEMMDR are anticipated, in particular from the developers of the Melton Mowbray North Sustainable Development. Overall £14m of developer contributions to the scheme are anticipated, some of these funds have already been received by LCC and it is currently forecast that the remaining contributions will be received between now and 2035.

3.5.11. For the purposes of the economic appraisal these costs have been converted to market prices (by applying a factor of 1.19) and then converted to 2010 prices and discounted to 2010 values. The PVC of the developer contributions for the scheme is **£7.2m**.

NORTHEN LINK ROAD SCHEME COSTS

3.5.12. The do-minimum scenario assumes that the Northern Link Road is open to traffic in 2040, and hence needs to be accounted for in the appraisal. The cost estimate for this section has been estimated as 29% of the total cost of NEMMDR (using the OBC cost breakdown assumption), which is **£18.7m** in 2010 prices discounted to 2010. As the Northern Link Road is expected to be wholly funded by developers in the do-minimum scenario this does not impact on the PVC but does impact business benefits and is accounted for in the appraisal.

NET SCHEME COSTS

3.5.13. The net scheme costs used for appraisal is **£61.1m** in present values. The breakdown of this is shown in Table 3-3 below.

Table 3-3 - Summary of Net Scheme Costs for Appraisal

	Cost (£m)
PVC (Whole Scheme)	68.3
PVC (Developer Contributions)	7.2
Net Scheme PVC	**61.1**

3.6 TRANSPORT ECONOMIC EFFICIENCY

3.6.1. The Transport Economic Efficiency (TEE) benefits consist of the components set out below.

- Travel time and Vehicle Operating Costs (VOC) benefits as a result of the scheme.
- Travel time and Vehicle Operating Costs (VOC) dis-benefits as a result of construction activities.
- Reduced investment and operation costs for business related to the do-minimum Northern Link.
- Developer contributions to the scheme costs (seen as dis-benefits here).

3.6.2. Travel time and VOC benefits were calculated with the use of the Transport User Benefits Analysis (TUBA) software. TUBA is the industry-standard software used to derive the travel time and VOC elements of the TEE benefits of a scheme. TUBA requires input from the transport model in the form of trip, time and distance matrices by year, time period and user class as well as scheme specific information such as years of appraisal, time slices, costs etc.

3.6.3. TUBA assesses travel time savings over the modelled area and then applies monetary values (known as Values of Time (VOT)) to derive the monetary benefits of those time savings.

3.6.4. TUBA also calculates Vehicle Operating Cost (VOC) changes which occur 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.

3.6.5. The full details of main TUBA analysis for the NEMMDR can be found in the Economic Appraisal Report (Appendix D).

3.6.6. It is likely that delays will be experienced by road users during the construction of the scheme, producing a short-term disbenefit. Information on construction phasing and duration was obtained from the contractor, Galliford Try, to assess the construction delay impact.

3.6.7. To model the costs of construction delays the highway models used for scheme assessment purposes were modified to represent the construction phases at each junction on the proposed route. A with-construction intervention and an equivalent do-minimum were prepared to provide inputs to TUBA for determining the costs of the expected delays. Assignments were run using the 2025 central case demand for years 2023 and 2024 and assumed that demand is unchanged between the with and without construction scenarios. For the 2034 and 2039 construction scenarios (related to the Northern Link Road construction in the do-minimum) the 2035 and 2040 central case demand were respectively used.

3.6.8. Full details of the methodology and assumptions used for calculating the construction impacts are included in the Economic Appraisal Report found in Appendix D.

3.6.9. The completed Transport Economic Efficiency (TEE) table is shown below (Table 3-4), including scheme impacts over the appraisal period, construction impacts and developer contributions.

Table 3-4 - TEE Table Central Case (000s)

Transport Economic Efficiency (TEE) Benefits		2010 prices, discounted to 2010
Consumer – Commuting user benefits	Travel Time	£24,108
	Vehicle Operating costs	-£535
	Construction	-£98
	Subtotal	**£23,475**
Consumer – Other user benefits	Travel Time	£39,665
	Vehicle Operating costs	-£4,607
	Construction	-£113
	Subtotal	**£34,945**
Business benefits	Travel Time	£43,979
	Vehicle Operating costs	£4,547
	Construction	-£234
	Reduced Do Minimum Costs	£18,218
	Developer Contributions	-£7,201
	Net Impact (business)	**£59,767**
Present value of Benefits		**£118,187**

3.6.10. Table 3-5 shows how the scheme benefits change by forecast year.

3.6.11. This shows an increase in benefits from 2025 to 2035, with a small reduction in 2039. Between 2039 and 2040 there is a more marked drop which reflects the Northern Link Road being included in the do-minimum in the latter year, which means that the additional infrastructure from 2040 onwards do-something is only the eastern section of the NEMMDR (i.e. Junctions 3 to 6). There is then a further, although more gradual, decline in benefits to 2051 reflecting the impact of discounting.

Table 3-5 - Present Value of TUBA benefits by modelled year (excluding greenhouse gases)

Year	Central Case (000s)
2025	£2,112
2030	£2,529
2035	£2,732
2039	£2,646
2040	£2,125
2051	£1,869
60-year Total	**£110,099**

3.7 SAFETY IMPACTS

3.7.1. The software package CoBA-LT (Cost and Benefit to Accidents – Light Touch, version 2.2) has been used to determine the accident benefits associated with the proposed scheme, with default link and junction combined rates used throughout.

3.7.2. "COB22_CoBA-LT Parameters File - TAG data book v1.17.xls" has been used without modification and is consistent with the November 2021 TAG Data Book.

3.7.3. The extent of the network used for the CoBA-LT analysis is presented in the figure below (Figure 3-2). This area was selected based on examination of the SATURN models to assess where there are large flow changes that can reasonably be attributed to the scheme.

Figure 3-2 - Defined Area of Influence for Accident Appraisal

3.7.4. Local accident rates have been calculated by road type for the road categories in the Area of Influence defined for the assessment of the proposed scheme.

3.7.5. The CoBA-LT network includes definition of each link type along with attributes such as link length and speed limit. The traffic flows used in the analysis are 24-hour AADT extracted from the LLITM traffic model.

3.7.6. Table 3-6 summarises the accident benefits for the scheme for the central case.

Table 3-6 - Summary of Discounted Accident Benefits - 2010 prices and values (£000s)

Description	Present Value
Total Without-Scheme Accident Costs	£909,027.80
Total With-Scheme Accident Costs	£913,127.40
Total Accident Benefits	**-£4,099.60**

3.7.7. The results of the accident analysis show that the scheme is expected to generate a disbenefit of **£4.1m**. The main driver of this disbenefit is the additional traffic that is attracted into the AoI because of the improved connectivity provided by the NEMMDR. This increase is forecast to be 0.43%, 0.39% and 0.38% for 2025, 2040 and 2051 respectively. This is a result of traffic rerouting, as well as an element of trip redistribution, and some very minor mode-choice effects, in the variable demand model.

3.7.8. However, and importantly, there are strong Distributional Impacts associated with the change to the accident pattern. The vulnerable group with the highest observed casualty rate is pedestrians and the scheme has the largest positive impact for that group as a whole, as well as for child and older pedestrians. Similarly, cyclists also have a number of beneficial impacts.

3.8 ACTIVE MODE BENEFITS- CYCLING BENEFITS

3.8.1. The NEMMDR includes provision of dedicated pedestrian and cycle facilities as part of the scheme.

3.8.2. Given the nature and location of the scheme outside Melton Mowbray it is anticipated the largest impact will be on cycle users (rather than pedestrians) and hence this is the focus of the analysis. Walking benefits are intrinsically linked to changes in severance, which are assessed elsewhere. As a result of the orbital nature of the route, and travel distances between junctions, benefits to pedestrians are expected to be minimal and as such are not formally quantified.

3.8.3. The impacts on cyclists have been calculated using DfT's Active Mode Appraisal Toolkit (AMAT). Cycle commuters and non-commuter cyclists were calculated from Census data and National Travel Survey information and adjusted according to TEMPro v7.2 growth forecasts for future years. Additional consideration was given to forthcoming housing growth in Melton Mowbray. This provided a cycling base year (2025) cycle demand for the opening year of the scheme as required by AMAT. The core assumption was that 5% of cycling trips across Melton Mowbray use the new infrastructure

3.8.4. Alternative forecast methods (for the impact of the scheme on cycle use) and a range of assumptions (e.g. alternative appraisal periods) were used to assess the potential benefits to cyclists. These are detailed in the Economic Appraisal Report and are summarised below:

- **Elasticity method** – elasticity method used to forecast change in cycle use (20 year appraisal period).
- **10% uplift** – forecast change in cycle use is assumed as 10% based on results from similar schemes in the UK (20 year appraisal period).
- **60 year appraisal** – elasticity method used to forecast change in cycle use (60 year appraisal period).
- **Higher usage** – same as elasticity method, but assuming 10% of cycling trips use the new infrastructure.
- **Alternative scenarios** - Two alternative scenarios are considered, one with the Southern Link Road being present in the opening year and one with additional, NEMMDR dependent, cycling infrastructure associated with the Melton Mowbray Transport Strategy being part of the do-something.

3.8.5. Table 3-7 below summarises the results of the analysis.

Table 3-7 - Summary of Discounted Accident Benefits - 2010 prices and values

Scenario	Test	% Usage	Demand increase	PVB
NEMMDR	**Elasticity method**	**5%**	**2.95%**	**£432,000**
NEMMDR	10% uplift	5%	10.00%	£930,000
NEMMDR	60-year appraisal	5%	2.95%	£1,037,000
NEMMDR	Higher usage	10%	2.95%	£660,000
Southern Link present	-	5%	2.00%	£365,000
Transport Strategy Cycle Routes	-	21%	7.06%	£1,490,000
Transport Strategy Cycle Routes	15% uplift	21%	15.00%	£2,090,000

3.8.6. The above table presents a potential range of benefits across all the scenarios tested. The elasticity method, assuming 5% of cycle demand uses the scheme and a 20-year appraisal period, is considered the most robust result, and hence the PVB of **£0.43m** is included in the main benefits reporting.

3.9 ENVIRONMENTAL IMPACTS- MONETISED

3.9.1. As set out in the FBC Appraisal Specification Report, the local air quality and noise assessment relies on the analysis carried out for the OBC (which is aligned with TAG Unit A3 advice). It was identified that it would be disproportionate to update this analysis at FBC given the limited impact on the Value for Money case. A brief summary of the method and results is provided below.

AIR QUALITY

3.9.2. The likely effects on air quality once the scheme is in place, relate predominantly to the changes in emissions from vehicles travelling along affected roads in the study area.

3.9.3. Plan level calculations and regional calculations were used to value the air quality impacts of the scheme. The standard air quality worksheet from TAG Unit A3 was used to calculate the impact

of the scheme on local air quality, regional air quality and the economic valuation of air pollution for the life of the scheme.

3.9.4. On the basis of OBC analysis, the scheme is anticipated to lead to an improvement in air quality (exposure to PM10 and NOx concentrations) overall for residential receptors, non-residential receptors as well as schools, nurseries, and hospitals.

3.9.5. The change in PM10 and NOx concentrations will provide a monetary benefit over 60 years of **£0.591m**.

NOISE

3.9.6. Changes in traffic flows can result in changes in noise, depending on whether properties are located adjacent to affected roads or not.

3.9.7. The standard noise worksheet from TAG Unit A3 was used to calculate the change in noise levels during the life of the scheme, the change in numbers of people “annoyed” and the monetary value of those changes (PVB).

3.9.8. The results output from the Noise analysis at OBC showed that there is predicted to be a net benefit from changes in noise levels, equating to **£3.8m** over the 60 year appraisal period.

3.9.9. No households were forecast to experience daytime traffic noise levels in excess of 80dB LAeq, 16h (façade) in the scheme opening year or forecast year. Three households were identified as potentially qualifying under the Noise Insulation Regulations.

3.9.10. The study area defined to assess the noise impacts of the scheme (following DMRB guidance) included 8,312 residential households.

3.9.11. Of these, based on the facade of the property which experiences the worst-case change in the short-term (opening year), 35 were predicted to experience a major increase in traffic noise consisting of one individual property north of Saxby Road, 2 on the edge of Thorpe Arnold and 32 on the northern edge of the town east of Scalford Road.

3.9.12. 3% of households were forecast to experience a moderate increase in traffic noise in the short-term primarily on the north and east sides of Melton Mowbray closest to the proposed scheme, Thorpe Arnold and Burton Lazars, with 41% of households forecast to experience a minor or negligible increase.

3.9.13. 8% of households were forecast to experience no change in the short-term and 47% a negligible or minor reduction.

3.9.14. Of the 42 non-residential sensitive receptors in the study area, 1 school on the northern edge of the town, west of Scalford Road, was forecast to experience a moderate increase in traffic noise, 14 to experience a negligible or minor increase, 4 with no change and 23 a negligible or minor reduction.

GREENHOUSE GASES

3.9.15. The TUBA programme has been used to assess the impact of the scheme on greenhouse gases, calculating the total carbon dioxide equivalent emissions (tCO2e) for the life of the scheme.

3.9.16. Although the scheme is forecast to result in significant journey time savings, it is also forecast to increase typical journey speeds and distances resulting in increased fuel consumption and hence increased greenhouse gas emissions.

3.9.17. The scheme is forecast to increase greenhouse gas emissions by circa 34,000 (tCO2e) over the 60 year appraisal period, leading to disbenefits of **£2.8m**.

3.9.18. A Carbon Management Plan (CMP) has been developed for the NEMMDR, with an aim to effectively manage carbon throughout the project lifecycle by encouraging early consideration of associated carbon emissions and creating associated governance structures and processes. This is discussed further in Section 7.9, with the full CMP found in Appendix B.

3.10 OTHER MONETISED IMPACTS (LEVEL 2)

3.10.1. The scheme is likely to affect the reliability of journey times and produce wider economic impacts in the area. These impacts have been assessed to capture the potential monetised impacts.

JOURNEY TIME RELIABILITY

3.10.2. The change in journey time reliability has been estimated based on the guidance contained within TAG Unit A1.3, Section 6.3 for urban roads.

3.10.3. This approach considers the ratio of the assigned time within the highway model to the free-flow time as a measure of the standard deviation in journey times and monetises this using similar assumptions adopted in the TUBA assessment of the scheme journey time impacts. The method and analysis is described in further detail in the Economic Appraisal Report.

3.10.4. The journey time reliability assessment predicts benefits from the scheme of **£5.41m** over the 60 year appraisal period.

WIDER ECONOMIC BENEFITS

3.10.5. To assess the wider impacts of the scheme, the DfT's Wider Impacts in Transport Appraisal (WITA) computer software was used (v2.2).

3.10.6. There are four types of wider impact which are appraised using WITA:

- **Agglomeration impact** – As per TAG Unit A2.4, this relates to the concentration of economic activity across an area. By improving the accessibility of an area to a greater number of firms and workers, transport schemes can deliver increases in Gross Domestic Product (GDP). The primary influences on determining agglomeration impacts are changes in travel costs, the number and location of workers, and the productivity of those workers.
- **Increased or decreased output in imperfectly competitive markets** – As per TAG Unit A2.2, this relates to the changes in the output of goods that use transport. Reductions in transport costs to business and/or freight allows for an increase in the production or output of goods or service markets.
- **Labour market impacts from more/fewer people working** – As per TAG Unit 2.3, this is the impact of a transport scheme on labour supply and is based mainly on changes in commuting travel costs.
- **Labour market impacts from the move to more/less productive jobs** – As per TAG Unit A2.3, a transport scheme may lead to a change in where people choose to work. Some jobs are more productive than others which can lead to changes in GDP.

3.10.7. The wider economic benefits from the elements above are shown in Table 3-8 as a 60-year present value of benefit (PVB).

Table 3-8 - Summary of Discounted WITA Benefits - 2010 prices and values (000s)

Wider Impact Measure	Benefit (£)
Agglomeration - Manufacturing	1,459
Agglomeration - Construction	1,335
Agglomeration - Consumer Services	4,565
Agglomeration - Producer Services	7,118
Agglomeration - Total	**14,477**
Labour supply impact	**673**
Move to more / less productive jobs	**-**
Increase output in imperfectly competitive markets	**4,853**
Total	**20,003**

3.10.8. As shown in the table above, the total wider economic impacts arising from the scheme is forecast to be **£20m** over the 60-year appraisal period.

3.11 ENVIRONMENTAL & SOCIAL IMPACTS- NON-MONETISED

3.11.1. This section considers the non-monetised impacts on the environment (landscape, townscape, historic environment, biodiversity and water environment) and is based on the assessments undertaken as part of the OBC, as it would be disproportionate to update this analysis at FBC given the limited changes to the scheme and the relatively small impact on the Value for Money case.

3.11.2. The social impacts described in this section are also not typically monetised and include journey quality, severance and security, which are also unchanged from the OBC assessment.

ENVIRONMENT – LANDSCAPE

3.11.3. The impact assessment on landscape was undertaken using the standard landscape worksheet from TAG Unit A-3. The output of the assessment was that the scheme would have a **slight adverse** impact on the landscape.

3.11.4. Whilst the landform will be permanently altered with the new highway development on a local level, the scheme does not impact loss of agricultural pattern or landscape elements beyond the highway corridor. Loss of screening vegetation would be offset by the landscape mitigation proposals.

3.11.5. There will also be a reduction in tranquillity levels in the immediate vicinity of the proposed development due to an increase in perception of highway infrastructure within the rural landscape. This includes Melton Country Park. However, this potential impact will be partially reduced by mitigation planting.

ENVIRONMENT – TOWNSCAPE

3.11.6. 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 A-3.

3.11.7. The results of the townscape worksheet show that the scheme will have very little effect on the character of the townscape, given that the proposed development is based away from the main urban area.

3.11.8. It is considered that there will be a slight beneficial impact, arising from the reduction of traffic within the town, but overall terms the impact on townscape is considered a **neutral**.

ENVIRONMENT – HISTORIC ENVIRONMENT

3.11.9. The historic environment comprises buildings and sites of architectural and historic significance. The impact of the scheme on historic environment was appraised qualitatively using the standard TAG Worksheet from WebTAG Unit A-3.

3.11.10. The study area contains 122 heritage assets. These include three scheduled monuments and 13 listed buildings (one grade I listed, two listed at grade II* and ten listed at grade II.). The scheduled monuments are St Mary and St Lazarus Hospital, Sysonby Grange and a moated grange at Spinney Farm. Other heritage assets include earthworks, negative earthworks, cropmarks, buildings and individual artefacts.

3.11.11. Whilst there will be no direct physical impacts on scheduled monuments or listed buildings, there is the potential for impacts on the setting of heritage assets, and in particular on the setting of the St Mary and St Lazarus Hospital, 400m from the A606 Burton Road roundabout. There is also potential for direct physical effects on both recorded and unrecorded heritage assets.

3.11.12. The results output from the worksheet showed that the scheme will have a **moderate adverse** impact on the historic environment.

ENVIRONMENT – BIODIVERSITY

3.11.13. In common with the other non-monetised environmental impacts, biodiversity was assessed using the qualitative and quantitative techniques set out within the TAG and by completing the standard TAG worksheet as part of the OBC submission.

3.11.14. The scheme has the potential to generate a range of effects upon statutory and non-statutory designated sites, habitats and protected species (in particular the potential for large adverse effects upon the River Eye SSSI).

3.11.15. However, with the implementation of appropriate avoidance measures, and mitigation to support and enhance the restoration of the River Eye SSSI it is predicted that this effect can be reduced to, at worse, a minor negative impact, but with appropriate support and implementation, a slight positive impact.

3.11.16. A scheme wide mitigation strategy aims to deliver no net loss to biodiversity within the extent of the proposed scheme boundary, including mitigating for potential adverse effects on bats, badgers and great crested newts, through avoidance measures and scheme design to support animal crossings points.

3.11.17. When these measures are considered, the scheme has a slight adverse effect on biodiversity that are not significant, in the medium to long term.

3.11.18. Even with mitigation following best practice standard guidelines, degradation to habitats and water quality arising from surface run-off has the potential to adversely affect the River Eye SSSI, given the close proximity of roundabouts and the requirement for the river to be bridged.

3.11.19. This leads to a range of scores with mitigation from slight adverse, to neutral with suitable mitigation, and potentially large beneficial (if the scheme helps to aid and encourage the site's restoration plan).

3.11.20. The predominant habitats through which the route would pass are improved grasslands and associated field boundaries. The potential adverse effect on some species with the introduction of the new road will be mitigated by appropriate habitat management, with generally neutral scores.

3.11.21. There will however be a slight adverse to the Melton Country Park local wildlife site. Whilst there will be no direct effects, the site is ecologically connected to the scheme by the disused railway embankment which runs north out of the local wildlife site and hydrologically by the Scalford Brook.

3.11.22. Therefore, the overall impact of the scheme on biodiversity is expected to be **slight adverse**.

ENVIRONMENT – WATER ENVIRONMENT

3.11.23. The water environment worksheet was completed to assess the potential impact of the scheme for different water environment features.

3.11.24. The scheme is located within the catchment areas of the River Eye, Scalford Brook, Thorpe Brook, Burton Brook and numerous of their tributaries within the study area. The area is mainly in Flood Zone 1, but there are areas of higher risk associated with the River Eye, Thorpe Brook and Scalford Brook (EA Main Rivers).

3.11.25. There are areas at risk of fluvial flooding with Flood Zones 2 and 3 (including 3b, functional floodplain) present at the locations of the proposed watercourse crossings. The drainage strategy for the scheme includes attenuation features to ensure no increase in runoff as a result of the increased impermeable areas and hence no detrimental increase in flooding potential in receiving catchments.

3.11.26. The main impact to the water environment is expected to result from morphological impacts relating to watercourse crossings, and in particular at the River Eye which is a SSSI.

3.11.27. The diversion of the River Eye, which is classified as an SSSI at this section, will have significant beneficial effects in terms of morphology. The diversion represents a potential opportunity to implement and augment parts of the River Eye restoration strategy (Natural England 2015) and help restore the river which was assessed as 'unfavourable (No Change)' in 2010. Opportunities for strategic intervention facilitated by the scheme will provide numerous benefits in terms of biodiversity and quality of the river channel. Diversion of the river channel will provide the opportunity for enhancement of the river and support the Water Framework Directive and SSSI objectives (i.e. have a beneficial effect).

3.11.28. Open span structures are proposed to convey the road across other primary watercourses. The design and span of which takes account of flood risk, morphology and ecological considerations. Road runoff will be treated by sustainable urban drainage systems. Other minor watercourses will be realigned through culverts under the road.

3.11.29. Overall, a **slight adverse** score has been assessed for the water environment impact, as on balance the crossing of multiple watercourses with new structures and outfalls for drainage will result in some localised degradation of the water environment, although there are significant beneficial effects to the River Eye.

SOCIAL – JOURNEY QUALITY

3.11.30. Journey quality depends on a number of factors all of which was qualitatively assessed in line with TAG Unit A-3 and the journey quality worksheet to make a judgement on the impact of the scheme on journey quality.

3.11.31. These factors include traveller care, traveller views, traveller stress as well as additional sub-factors.

3.11.32. The results of the assessment showed that the NEMMDR will have a **slight beneficial** effect on journey quality, in directly reducing driver frustration for more than 10,000 users per day, as well as dedicated facilities for walking and cyclist users.

3.11.33. Impacts on traveller care, views and other sub-factors are considered neutral.

SOCIAL - SEVERANCE

3.11.34. 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 NEMMDR on severance, the difference in the levels of severance in the do-something and do-minimum cases have been examined.

3.11.35. The scheme is likely to have a slight adverse effect on ease of access to facilities and agricultural land during construction. However, the proposed scheme will reduce severance during the operation phase because of the provision of new dedicated facilities for pedestrians and cyclists along the route, and at intersections with existing highways and footpaths.

3.11.36. The proposed scheme would also have beneficial effects on severance through the reduction of traffic on other roads in the town centre.

3.11.37. In summary, the scheme would have a **slight beneficial** impact on severance.

3.12 ANALYSIS OF DISTRIBUTIONAL IMPACTS

3.12.1. The assessment of distributional impacts 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.

3.12.2. As per TAG Unit A4.2 the distributional impact appraisal requires the consideration of the following eight indicators:

- Noise;
- Air Quality;
- Accessibility;
- Security;
- Severance;
- User Benefits (journey times and vehicle operating costs);
- Personal Affordability; and
- Accidents

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

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

3.12.4. Step 1 identifies which of the eight distributional impacts should proceed to Step 2, by assessing whether their impacts are either significant or concentrated. In the case of the NEMMDR, Security and Accessibility did not need to be taken further to Step 2.

3.12.5. Table 3-9 below shows the grading system from TAG Unit A4.2 that is used to assess the different societal groups considered in the distributional impact assessment.

Table 3-9 – Grading System for Distributional Impacts

Impacts	Assessments	
Beneficial and the population impacted is significantly greater than the proportion of the group in the total population	Large Beneficial	✓✓✓
Beneficial and the population impacted is broadly in line with the proportion of the group in the total population	Moderate Beneficial	✓✓
Beneficial and the population impacted is smaller than the proportion of the group in the total population	Slight Beneficial	✓
There are no significant benefits or disbenefits experienced by the group for the specified impact	Neutral	
Adverse and the population impacted is smaller than the proportion of the population of the group in the total population	Slight Adverse	×
Adverse and the population impacted is broadly in line with the proportion of the population of the group in the total population	Moderate Adverse	××
Adverse and the population impacted is significantly greater than the proportion of the group in the total population	Large Adverse	×××

3.12.6. Full details of the methodology and detailed results for each distributional impact for NEMMDR are presented Economic Appraisal Report and are summarised below.

DISTRIBUTIONAL IMPACTS- USER BENEFITS

3.12.7. For distributional impact assessment, only the benefits resulting from non-business journeys were considered, to limit the appraisal to benefits experienced by individuals rather than businesses. The non-business trips in LLITM are segmented by income using the three income bands which have been used in the analysis.

3.12.8. The results of the assessment for user benefits are presented in Table 3-10.

3.12.9. From the table it can be seen that there is a large beneficial impact for the low-income group, a slight beneficial impact for the medium income group and a moderate beneficial impact for the high income group in Melton Borough.

Table 3-10 – Distributional Impacts of User Benefits (£m)

	Income Bands			Total
	Low	Middle	High	
Net benefits	10.8	13.4	15.0	39.2
Net disbenefits	-	-	-	-
Gross benefits	10.8	13.4	15.0	39.2
Gross disbenefits	-	-	-	-
Share of benefits	28%	34%	38%	
Share of disbenefits	-	-	-	-
Share of population in income band	23%	42%	35%	
Assessment	✓✓✓	✓	✓✓	

DISTRIBUTIONAL IMPACTS- NOISE

3.12.10. The results of the distribution assessment for noise based on income band are presented in Table 3-11 and Table 3-12 for daytime and nightime respectively.

Table 3-11 – Distributional Impacts of daytime noise on households by income band

	Income Group			Total
	Low	Middle	High	
Population with an increase in noise	391	745	541	1,677
Population with a decrease in noise	616	1,104	785	2,505
Population with no change in noise	4,552	8,316	5,807	18,675
Net winners/losers	225	359	244	828
Percentage of winners/losers in the affected population	27%	43%	29%	
Percentage of the affected population	24%	44%	31%	
Assessment	✓✓	✓✓	✓✓	

Table 3-12 – Distributional Impacts of night-time noise on households by income band

	Income Group			Total
	Low	Middle	High	
Population with an increase in noise	16	28	22	66
Population with a decrease in noise	290	518	367	1,174
Population with no change in noise	5,254	9,620	6,744	21,617
Net winners/losers	274	490	345	1,108
Percentage of winners/losers in the affected population	25%	44%	31%	
Percentage of the affected population	24%	44%	31%	
Assessment	✓✓	✓✓	✓✓	

3.12.11. The assessed impact is moderately beneficial for all income groups. None of the income groups are disproportionately affected by the scheme.

3.12.12. An assessment has been carried out of the noise impact of the scheme on social groups living in the area that are vulnerable to changes in noise levels, including children and older people. This assessment was carried out using Census and model output data to capture the impacts on these vulnerable groups.

3.12.13. The assessed impacts for both the children and older people vulnerable groups are moderately beneficial. Neither vulnerable group is disproportionately affected.

3.12.14. An assessment of non-residential sensitive receptors was also carried out. Noise impacts in the design year of the scheme are forecast to be negligible (i.e. less than 3dB change), and the in the majority of cases (33 out of 42) the forecast impact is a decrease in noise levels. As no locations and associated vulnerable groups are impacted, the impact at non-residential sensitive receptors is neutral.

DISTRIBUTIONAL IMPACTS- AIR QUALITY

3.12.15. The distributional impact assessment of the scheme's effect on air quality has been carried out, covering PM10 and NO2 emissions and the impact on different income groups and the impact on children. The analysis of air quality has not been updated since the OBC, and hence draws on the OBC forecasts in the distributional impact analysis.

3.12.16. The results of the assessment of the PM10 emissions impacts by income group are shown in Table 3-13.

Table 3-13 – Distributional Impacts of PM_{10} on Households by Income Band

	Income Group			Total
	Low	Medium	High	
Households with increased PM_{10}	71	133	142	347
Households with decreased PM_{10}	357	632	466	1,455
Households with no change in PM_{10}	1,033	1,897	1,398	4,328
Net number of 'winners'	286	499	323	1,108
Proportion of net 'winners' by category	26%	45%	29%	
Share of population in income band	24%	43%	33%	
Assessment	✓✓	✓✓	✓✓	

3.12.17. The slightly lower share of benefits experienced by the high-income households is related to the larger percentage of high-income households outside Melton Mowbray area, where increases in concentration are forecast. In contrast the slightly higher share of benefits experienced by the low- and middle-income groups are related to their relatively high percentages in Melton Mowbray where decreases in concentration are forecast.

3.12.18. The differences between the share of benefit and proportions of each income group in the population are however <5% and broadly in-line with the population. The assessment for PM10 is therefore moderately beneficial for all income groups.

3.12.19. There is only a small variation in the proportion of children in the population in the impact area, so the proportion of net benefits are likely to be in proportion of children in the population.

3.12.20. Table 3-14 shows that the scheme is beneficial and that the proportion of net benefits to children are in-line with the proportion of children in the population.

Table 3-14 – Distributional Impacts of PM10 on Children

	Population Groups		All
	Children	Adults	
Population with PM_{10} increase	147	807	954
Population with PM_{10} decrease	608	3,393	401
Population with no change in PM_{10}	2,025	9,877	11,902
Net number of 'winners'	461	2,586	3,047
Proportion of net 'winners' by category	15%	85%	
Share of population in each group	16%	84%	
Assessment	✓✓	**n/a**	

3.12.21. The results of the assessment of local air quality in terms of NO2 emissions by income group are shown in Table 3-15.

Table 3-15 – Distributional Impacts of PM_{10} on households by income band

	Income Band			Total
	Low	Medium	High	
Households with increased PM_{10}	127	235	235	597
Households with decreased PM_{10}	653	1,165	855	2,673
Households with no change in PM_{10}	682	1,263	915	2,860
Net number of 'winners'	526	930	620	2,076
Proportion of net 'winners' by category	25%	45%	30%	
Share of population in income band	24%	43%	33%	
Assessment	✓✓	✓✓	✓✓	

3.12.22. The above table shows the NO2 impacts in each of the three income bands. The slightly lower share of benefits experienced by the high-income households is, like PM10, related to the larger percentage of high-income households outside Melton Mowbray, where the increases in concentration are forecast. In contrast the slightly higher share of benefits experienced by the low- and middle-income groups are related to their relatively high percentages in Melton Mowbray where decreases in concentration are forecast.

3.12.23. The differences between the share of benefit and proportions of each income group in the population are however <5% and broadly in-line with the population. The assessment is therefore moderately beneficial for all income groups.

3.12.24. Table 3-16 shows the NO2 impacts on children. This demonstrates that the scheme is beneficial and that the proportion of net benefits to children are in-line with the proportion of children in the population. The assessment is moderately beneficial.

Table 3-16 – Distributional Impacts of NO2 on Children

	Population Groups		All
	Children	Adults	
Population with NO_2 increase	254	1,388	1,642
Population with NO_2 decrease	1,162	6,188	7,351
Population with no change in NO_2	1,364	6,501	7,865
Net number of 'winners'	908	4,801	5,709
Proportion of net 'winners' by category	16%	84%	
Share of population in each group	16%	84%	
Assessment	✓✓	**n/a**	

DISTRIBUTION IMPACT OF ACCIDENTS

3.12.25. Table 3-17 below summarises the distributional impact assessment for accidents using the vulnerable groups identified in TAG A4.2.

Table 3-17 – Summary of Distributional Impacts of accidents

Impact	Child Pedestrians	Older Pedestrians	Older Drivers	Pedestrians	Cyclists	Motorcyclists	Young Male Drivers
Large Beneficial	5	6	4	18	4	4	4
Moderate Beneficial	5	3	5	11	9	11	9
Slight Beneficial	1	0	1	9	0	1	2
Neutral	4	0	8	10	9	14	18
Slight Adverse	0	0	0	0	0	2	1
Moderate Adverse	1	0	0	1	0	3	4
Large Adverse	1	1	2	2	2	5	3

3.12.26. The table above shows that all the vulnerable groups have been assessed with impacts that are either neutral or beneficial.

3.12.27. The vulnerable group with the highest observed casualty rate is that of the pedestrians and the scheme has the largest positive impact for that group as a whole, and child and older pedestrians. Similarly, cyclists also have a significant number of beneficial impacts although the more conservative neutral score is assigned.

DISTRIBUTIONAL IMPACT OF SEVERANCE

3.12.28. Severance impacts are expected from increases in traffic on some rural main roads and from decreases in traffic throughout Melton Mowbray. The social groups that are potentially vulnerable to the effects of severance because of changes in the transport network are those without access to cars, older people, people with disabilities, parents with pushchairs, and children.

3.12.29. Severance impacts of the scheme have been considered for a range of areas/routes in and around Melton Mowbray, across a range of societal groups. The detailed results are included in the Economic Appraisal Report. The analysis demonstrated the impact is overwhelmingly beneficial for the larger, more populous, areas, with the overall assessment as beneficial for all societal groups considered.

DISTRIBUTIONAL IMPACT OF PERSONAL AFFORDABILITY

3.12.30. Table 3-18 provides a summary of the personal affordability impacts of the scheme across income groups. The appraisal of this impact uses the non-working time user benefits data (fuel and non-fuel operating costs) derived from TUBA.

Table 3-18 – Distributional Impacts on Personal Affordability

	Income Band			Total
	Low	Medium	High	
Gross benefits	84,755	87,163	116,540	288,458
Gross disbenefits	-671,117	-872,854	-1,003,242	-2,547,213
Net disbenefits	-586,362	-785,691	-886,702	-2,258,755
Share of disbenefits	26%	35%	39%	
Share of population in income band	22%	42%	35%	
Assessment	××	×	××	

3.12.31. The analysis shows that the share of disbenefits across the income groups are in-line with the population for low and high-income groups and, by a small margin, slightly less for the middle-income group. The distribution is related to the location relative to the NEMMDR and the trip length and distribution of the income groups.

3.13 INITIAL BENEFIT-COST RATIO (BCR)

3.13.1. The Benefit-Cost Ratio (BCR) is defined by dividing the Present Value of Benefits (PVB) by the Present Value of Costs (PVC).

3.13.2. According to the Value for Money Framework, Value for Money categories are defined as follows (for positive PVCs):

- Very Poor VfM if the BCR is negative;
- Poor VfM if BCR is below 1.0 (and positive);
- Low VfM if the BCR is between 1.0 and 1.5;
- Medium VfM if the BCR is between 1.5 and 2;
- High VfM if the BCR is between 2.0 and 4.0; and
- Very High VfM if the BCR is greater than 4.0.

3.13.3. The initial BCR is based on the monetised assessment of elements which contain the highest level of assurance. The Analysis of Monetised Costs and Benefits (AMCB) table is provided below (Table 3-19). This shows the scheme has an initial BCR of **1.95**.

Table 3-19 – AMCB Table for Initial BCR (000's)

Noise	£3,798
Local Air Quality	£591
Greenhouse Gases	-£2,753
Journey Quality	-
Physical Activity	£432
Accidents	-£4,100
Economic Efficiency: Consumer Users (Commuting)	£23,475
Economic Efficiency: Consumer Users (Other)	£34,945
Economic Efficiency: Business Users and Providers	£59,767
Wider Public Finances (Indirect Taxation Revenues)	£2,943
Present Value of Benefits (PVB)	**£119,098**
Present Value of Costs (PVC)	**£61,139**
Net Present Value (NPV)	**£57,959**
BCR	**1.95**

3.14 ADJUSTED BENEFIT COST RATIO

3.14.1. In order to calculate an adjusted BCR for the scheme, benefits from improved journey time reliability and the impact on the wider economy have been undertaken and added to the benefits of the scheme included in the initial BCR.

3.14.2. Table 3-20 below summarises the adjusted AMCB table incorporating the journey time reliability and wider economic benefits. This shows the scheme has an adjusted BCR of **2.36**.

Table 3-20 – AMCB Table for Adjusted BCR (000s)

Noise	£3,798
Local Air Quality	£591
Greenhouse Gases	-£2,753
Journey Quality	-
Physical Activity	£432
Accidents	-£4,100
Economic Efficiency: Consumer Users (Commuting)	£23,475
Economic Efficiency: Consumer Users (Other)	£34,945
Economic Efficiency: Business Users and Providers	£59,767
Wider Public Finances (Indirect Taxation Revenues)	£2,943
Journey Time Reliability	£5,414
Wider Impacts	£20,003
Present Value of Benefits (PVB)	**£144,515**
Present Value of Costs (PVC)	**£61,139**
Net Present Value (NPV)	**£83,375**
BCR	**2.36**

3.15 SENSITIVITY TESTS

OVERVIEW

3.15.1. A number of sensitivity tests have been carried out to help understand uncertainty in the appraisal of the scheme - particularly related to input assumptions such as future economic growth, fuel prices and employment levels. These sensitivity tests will help decision makers to understand the robustness of the scheme appraisal to such input assumptions and how these might affect the Value for Money.

3.15.2. TAG (Unit M4) has been used to define low and high growth sensitivity tests for the NEMMDR scheme. Further to these, sensitivity tests of alternative scenarios have also been tested, relating to alternative network assumptions and associated scheme delivery.

LOW AND HIGH GROWTH

3.15.3. The low and high growth scenarios are documented in the LLITM 2014 Base Traffic Forecasting Report and the Economic Appraisal Report.

3.15.4. These scenarios have been tested for the main scheme impacts (i.e. TEE impacts; although construction impacts are assumed to remain unchanged) and those where the analysis was proportionate (i.e. accidents).

3.15.5. The table below (Table 3-21) summarises the ACMB table for initial and adjusted BCR for the high and low growth tests.

Table 3-21 – Low and High Growth AMCB Tables for Initial and Adjusted BCR (000s)

	Initial BCR		Adjusted BCR	
	Low Growth	High Growth	Low Growth	High Growth
Noise (assumed the same as the central case)	£3,798	£3,798	£3,798	£3,798
Local Air Quality (assumed the same as the central case)	£591	£591	£591	£591
Greenhouse Gases	-£2,766	-£3,010	-£2,766	-£3,010
Journey Quality	-	-	-	-
Physical Activity (assumed the same as the central case)	£432	£432	£432	£432
Accidents	-£2,957	-£5,688	-£2,957	-£5,688
Economic Efficiency: Consumer Users (Commuting)	£18,726	£27,719	£18,726	£27,719
Economic Efficiency: Consumer Users (Other)	£27,143	£39,755	£27,143	£39,755
Economic Efficiency: Business Users and Providers	£50,564	£68,113	£50,564	£68,113
Wider Public Finances (Indirect Taxation Revenues)	£2,919	£3,214	£2,919	£3,214
Journey Time Reliability (assumed the same as the central case)			£5,414	£5,414
Wider Impacts (assumed the same as the central case)			£20,003	£20,003
Present Value of Benefits (PVB)	£98,450	£134,924	£123,867	£160,341
Present Value of Costs (PVC)	£61,139	£61,139	£61,139	£61,139

Net Present Value (NPV)	£37,311	£73,785	£62,728	£99,202
BCR	**1.61**	**2.20**	**2.03**	**2.62**

3.15.6. The table above shows that the scheme BCR is sensitive to alternative levels of traffic growth, however the adjusted BCR in both the low growth and high growth scenarios fall in the High Value for Money range.

ALTERNATIVE SCENARIOS

3.15.7. Two alternative scenarios have been considered in the appraisal of the NEMMDR. These both represent scenarios where schemes with lower certainty, but which are being developed, are included in the do-minimum.

ACCELERATED SOUTHERN LINK SCENARIO

3.15.8. Significant work on planning and delivery of the developer-led southern section of the NEMMDR between Burton Road and Leicester Road has been undertaken by LCC, MBC and the associated developers. This has secured Homes England Housing Infrastructure Fund funding for the Southern Link Road and has also satisfied all parties that the road can be funded and mechanisms to facilitate funding from developer contributions are in place. Unusually for a mature scheme, the work has not yet produced associated planning applications for either the link road or the entirety of the housing development and, as a result, the road scheme was not included in the do-minimum.

3.15.9. In the central case do-minimum, the Southern Link is added piecemeal between 2025 and 2040 as the Southern Sustainable Neighbourhood is built out. For modelling purposes, in the Accelerated Southern Link Road Scenario, the Southern Link is assumed to be open in 2025.

MELTON MOWBRAY TRANSPORT STRATEGY SCENARIO

3.15.10. The Melton Mowbray Transport Strategy (MMTS) is envisaged as an additional set of measures, dependent on the delivery of the NEMMDR, that will be implemented in the centre of Melton Mowbray to further reduce the impact of traffic on the town. Currently these are at an early stage of development, with an interim MMTS produced, which is the subject of this sensitivity test. Wider improvements to the town such as walking, cycling and bus improvements are to be developed in the full MMTS which has yet to be completed.

3.15.11. The most significant change from the central case that is introduced to represent this scenario, is the phased introduction of HGV penalties, representing additional weight limits on the radial routes inside the NEMMDR intended to remove HGV through-traffic from the town.

3.15.12. It is also envisaged that the A and B roads inside the NEMMDR will be declassified to further deter through-traffic from the town. Although this behavioural change cannot be modelled in the traffic model, the upgrade of Welby Road, Welby Lane and St Bartholomew's Way to a standard commensurate with an A-Road is modelled as this route is likely to become part of the A6006, linking Asfordby Road with Nottingham Road and the NEMMDR at Roundabout 1.

3.15.13. The main change in the model forecasts compared with the central case is the reduction of HGVs in the town centre. HGVs that do access the town are forecast to route via the NEMMDR and the shortest route from the NEMMDR to their destination. HGVs on through routes use the NEMMDR where possible. The changes on the Welby Road – St Bartholomew's Way route are negligible as the

preferred routeing from the east (Six Hills, Paddy's Lane A46 junctions) to the NEMMDR is via Six Hills Lane and Nottingham Road (A606) rather than the A6006.

3.15.14. Both scenarios were tested in TUBA and the results compared to the central case.

3.15.15. Compared with the central case, the Accelerated Southern Link Road Alternative Scenario shows a marginally higher PVB from TUBA (£110.1m vs. £107.4m), reflecting the accelerated benefits of the Southern Link Road.

3.15.16. The Melton Mowbray Transport Strategy Alternative Scenario shows a small drop in benefits compared to the central case (£100.5m vs. £107.4m), a result of the partial nature of the strategy tested which primarily consists of HGV restrictions; this is reflected in the Business Freight segment, which experiences the most significant (negative) change.

3.16 APPRAISAL SUMMARY TABLE AND SUPPORTING WORKSHEETS

3.16.1. The Appraisal Summary Table (AST) presents evidence from the analysis that is undertaken to inform the Economic Case in a single page summary.

3.16.2. The scheme AST, reporting the above monetised values or qualitative scores, is included in Appendix G together with the Transport Economic Efficiency and Public Accounts tables.

3.16.3. All the TAG worksheets that support the appraisal have been included in Appendix H.

3.17 VALUE FOR MONEY STATEMENT

3.17.1. Overall, the scheme is assessed to be High Value for Money (VfM), based on the central estimate of monetised impacts. The initial BCR of the central case is 1.95, with an adjusted BCR of 2.36.

3.17.2. The largest scheme benefits are journey time and vehicle operating cost savings for road users (business user benefits are £44.6m and commute and other user benefits are £58.4m).

3.17.3. The scheme is forecast to lead to some monetised environmental disbenefits, including greenhouse gases and accidents, at £2.8m and £4.1m respectively, due to overall increased car travel. Positive monetised environmental benefits include noise and air quality impacts, at £3.8m and £0.6m respectively. Health benefits are also expected, through an increase in active mode use, these are monetised at £0.4m.

3.17.4. The scheme is expected to deliver positive wider economic impacts through agglomeration, labour supply and output impacts, totalling £20.0m. Journey time reliability impacts are also positive at £5.4m.

3.17.5. Overall the non-monetised impacts are likely to be negative on balance, with the most significant impact being a moderate adverse impact on the historic environment, with all other impacts being slight (positive or negative) or neutral. The non-monetised impacts are not likely to impact the VfM category.

3.17.6. The scheme cost is £61.1m (PVC), including 20% optimism bias consistent with the advice in TAG.

3.17.7. Considering alternative scenarios of traffic growth, the VfM remains in the High category in the low traffic growth scenario with an adjusted BCR of 2.03; similarly, the high traffic growth test shows High VfM with an adjusted BCR of 2.62. The impact of alternative network assumptions, e.g. accelerated delivery of the Southern Link Road, on the scheme benefits is minimal and this doesn't affect the VfM category.

4

FINANCIAL CASE

4 FINANCIAL CASE

4.1 INTRODUCTION

4.1.1. This section sets out the Financial Case for the proposed scheme to demonstrate its affordability. AS such it describes:

- How much the proposed scheme is expected to cost, and how this has been calculated;
- Risks that could affect the cost of the scheme;
- How the scheme will be paid for and by whom; and
- The anticipated profile of expenditure over time (whole life costs).

4.1.2. This section deals with costs and accounting issues. The question of value for money is dealt with separately in the Economic Case.

4.1.3. Whole life costs can be defined include the capital costs to construct the scheme, plus maintenance and renewal costs, that are estimated to occur over the lifetime of the project, further described below:

- **Capital costs** are construction costs, land costs, preparation costs (planning and designing the scheme) and supervision costs during the scheme construction; and
- **Maintenance costs** include any costs associated repairs and maintenance required for the highway throughout the lifespan of the scheme.

4.2 ASSUMPTIONS

4.2.1. The Financial Case for the North and East Melton Mowbray Distributor Road (NEMMDR) is based on detailed design, development and Early Contractor Involvement (ECI) relating to the costing of the preferred route option, by Leicestershire County Council (LCC) and the appointed designers AECOM.

4.2.2. As shown in the Scheme Drawings in Appendix I, the following list of items have been included in the tendered prices developed for the NEMMDR scheme from this process:

- 6.9km of 9.3m wide carriageway
- Combined cycleway/footway along most of the route
- 6 roundabouts and tie-ins with existing side roads
- Bridge over River Eye (35m span)
- Railway bridge (46.75m span)
- Associated works

4.2.3. The full Activity Schedule can be found in Appendix J.

4.3 BASE COSTS

4.3.1. The estimated base costs for the scheme are set out in Table 4-1.

4.3.2. These include preparatory costs associated with the scheme design, business case, land acquisition, site supervision and assurance, construction, and preliminaries.

4.3.3. The funding breakdown and spend by financial year is discussed in Section 4.7.

Table 4-1 – Base Costs 2022 (Q4) prices

Category	Estimated Base 2022 Q4 (excl. inflation)
Land Costs	£2,296,000
Construction Costs	£87,771,062
Preparation Costs	£4,431,751
Total Base Costs	**£94,498,813**

4.4 INFLATION

4.4.1. To convert from a 2022 price base to the prices at the year of spend, an inflation allowance has been made between the date of the estimate and the date when the expenditure is expected to occur. Uplift factors to reflect price inflation from 2022 Q4 prices to year of spend have been estimated using Building Cost Information Service (BCIS) inflation forecasts which range between 0.4% - 5.0% depending on year of spend. Noting the current volatility of both general and construction inflation rates, BCIS inflation forecasts are currently the most credible and reputable source for such data. This is shown in Table 4-2.

Table 4-2 - BCIS inflation forecasts

Financial Year	BCIS inflation forecast
2022/23	0.4%
2023/24	2.7%
2024/25	5.0%
2025/26	3.2%

4.4.3. The scheme base cost has then been adjusted using the above methodology to include real cost increases. The total impact of inflation on scheme costs is **£3.65m**.

4.4.4. Therefore, the estimated base cost inflated from 2022 price base is **£98,148,326**, as shown in Table 4-3.

Table 4-3 – Base Costs incl. Inflation

Category	Estimated Base 2022 Q4 incl. inflation
Total Base Costs	£94,498,813
Inflation	£3,649,513
Total Base Costs (incl. Inflation)	**£98,148,326**

4.5 ESTIMATING UNCERTAINTY

RISK ADJUSTED COST

4.5.1. The risk adjusted total cost at is set out in Table 4-4 below.

4.5.2. A Quantified Risk Assessment (QRA) has been undertaken, resulting in a risk estimate of £5,856,401 (P50), which is detailed in the Economic Assessment Report (which can be found in Appendix D) and further discussed in Section 6.8.

Table 4-4 – Risk-Adjusted Base Costs

Category	Estimated Base 2022 incl. inflation
Total Base Costs	£98,148,326
Quantified Risk	£5,856,401
Total Risk-Adjusted Base Cost	**£104,004,727**

ESTABLISH RISK RESPONSE PLAN & RESPONSIBILITIES

4.5.4. The main financial risks and associated mitigation measures are summarised in Table 4-5.

4.5.5. Further detail on these risks and associated risk management strategy can be found in the Management Case, the Full Risk Registers for the NEMMDR scheme is included in Appendix K.

Table 4-5 – Overview of Financial Risks

ID	Risk	Risk Mitigation
1	**Cost**	
1.1	Risk of inflation leading to increased project costs.	Account for regular market checks and forward planning on cost changes
2	**Funding**	
2.1	As outlined in Section 6.3, any risk of funding delay could lead to a programme delay/ inflation. Potential delay to scheme increases costs and abortive work. If funding is cancelled, significant proportion would not be able to be constructed resulting in abortive cost	Keeping regular contact with scheme stakeholders.
3	**Land**	
3.1	Additional Land negotiation costs could lead to an increase in project costs	

4.6 HISTORIC COSTS

4.6.1. Costs incurred prior to October 2022 are excluded from the economic assessment but are reported below for completeness.

4.6.2. These costs total **£11.25m** and have been funded by LCC. Activities include design fees, Business Case development fees and LCC fees associated with project management, legal and property costs.

Table 4-6 – Risk-Adjusted Base Costs

Category	Estimated Base 2022 Q4 incl. inflation
Base Cost	£98,148,326
Quantified Risk	£5,856,401
Costs prior to Oct 2022	£11,246,048
Total Risk-Adjusted Base Cost	**£115,250,775**

4.7 SPEND PROFILE

4.7.1. Table 4-7 shows the costs broken down and profiled over the length of the scheme delivery period.

4.7.2. Subject to funding, construction of the scheme will start in early-2023 and the new road will open to traffic in mid-2025.

Table 4-7 – Risk adjusted forecast expenditure

	Costs prior to Oct 2022	2022/23	2023/24	2024/25	2025/26	Total
Preparation	*£10,027,703*	£1,737,928	£1,331,088	£1,233,107	£129,628	£14,459,454
Land	*£0*	£2,066,400	£0	£229,600	£0	£2,296,000
Construction	*£1,181,688*	£3,006,794	£42,453,929	£35,660,233	£6,650,106	£88,952,750
Inflation	*£36,657*	£25,972	£1,255,446	£2,065,176	£302,919	£3,686,170
Total including inflation	*£11,246,048*	£6,957,923	£45,040,463	£39,188,116	£7,082,653	£5,856,401
Risk	-	-	£1,952,134	£1,952,134	£1,952,134	£6,082,284
Total Risk Adjusted Costs	***£11,246,048***	**£6,837,094**	**£46,992,597**	**£41,140,250**	**£9,034,787**	**£115,250,775**

4.8 WHOLE LIFE COSTS

4.8.1. Although the funding bid is for a contribution towards the capital costs of delivering the scheme, the business case also considers the whole-life scheme costs.

4.8.2. These include the costs of maintaining the highway and associated infrastructure assets and the longer-term costs of infrastructure renewal.

4.8.3. The annual maintenance cost for the scheme is estimated to be £80,539 in 2022 prices. This is based on non-traffic related costs (inc. footway/cycleways) of £7,400 per km in 2002, taken from the COBA Manual. This was then multiplied by the scheme length (6.9km) and inflated to 2022 prices.

4.8.4. To calculate the whole life maintenance costs this annual cost is inflated by 2.1% per annum. The total maintenance costs for the scheme, including inflation, amounts to **£11.9m**. This is based on an assumed scheme life of 60 years from 2026.

4.8.5. These costs will be paid for by LCC, and a commitment to the future costs of maintaining the road and assets is included in the S151 Officer Letter supporting the scheme, which can be found in Appendix L.

4.8.6. The scheme is not expected to generate any direct income.

4.9 FINANCING AND FUNDING ARRANGEMENTS

FUNDING STRATEGY

4.9.1. The NEMMDR will be funded from a combination of National Government, LCC, Leicester and Leicestershire Enterprise Partnership (LLEP) and private sector contributions.

NATIONAL GOVERNMENT

4.9.2. The scheme successfully secured £49.5m of provisional Government funding following a bid to the Department for Transport Local Major Schemes Fund in May 2018.

LOCAL CONTRIBUTION

4.9.3. The local contribution is comprised of LCC and LLEP funding.

4.9.4. The local contribution totals £40.5m towards the scheme costs (excluding costs before October 2022) and represents 39% of the total scheme cost.

THIRD PARTY CONTRIBUTION

4.9.5. A third-party contribution of £14m is anticipated, which will come from private sector (developer) contributions, through Community Infrastructure Levy (CIL) and S106 agreement.

4.9.6. The County Council and Melton Borough Council have formal agreement to cash-flow developer contributions in advance of their receipt, thereby enabling the accelerated delivery of housing growth; whilst simultaneously delivering the necessary transportation infrastructure without placing an undue upfront financial burden on developers. This is detailed in the signed S151 Officer Letter submitted as part of the bid (Appendix L).

FUNDING REQUEST AND PROFILING

4.9.7. The profile of funding and allocation by contributors is set out in in Table 4-8 below. This demonstrates affordability of the scheme, with the secured funding from DfT, Local Government (which includes the LLEP), and the Private Sector equalling the total cost of the scheme as outlined in Section 4.7.

4.9.8. It is proposed that the DfT funding is used in the initial years of the scheme delivery period, with the local contribution utilised to fund delivery from 2024/25.

Table 4-8 – Funding request and profiling

	Costs prior to Oct 2022	2022/23	2023/24	2024/25	2025/26	Total
DfT	-	£3,252,205	£40,666,958	£5,552,837	£0	£49,472,000
Local	*£11,246,048*	£2,664,553	£0	£30,049,554	£7,818,621	£51,778,776
Private	-	£920,336	£6,325,639	£5,537,859	£1,216,166	£14,000,000
Total	***£11,246,048***	£6,837,094	£46,992,597	£41,140,250	£9,034,787	£115,250,776

FUNDING SUPPORT

4.9.9. There has been ongoing political support for the need for intervention in Melton Mowbray from LCC and Melton Borough Council ever since the first Local Transport Plan, with a number of considerations over this time. Since 2014 there has been accelerated development of a comprehensive and evidence-led options appraisal exercise to meet the demands of both existing congestion and traffic related impacts in Melton Mowbray, as well as seeking to deliver on the high levels of housing and employment growth proposed for the town in the emerging Local Plan.

4.9.10. Melton Borough Council and LCC have undertaken a number of transport studies to assess current and future pattern of traffic within Melton Mowbray as well as the extent to which the existing transport system can absorb existing and future demand from growth envisaged in the emerging Local Plan.

4.9.11. In the case of Melton Borough Council, the need for a strategic intervention has been strongly recognised and has become an integral element of the adopted Local Plan as a key measure to enable and deliver economic and housing growth.

4.9.12. The scheme secured LCC cabinet support, with the following resolutions agreed at each stage of the development process:

- March 2014 the Cabinet approved the principles set out in the Leicester and Leicestershire Enterprise Partnership's (LLEP) Strategic Economic Plan, which prioritises support for the economy of Market Towns and rural Leicestershire.
- The County Council's Enabling Growth Action Plan (approved in March 2015) supports the development of Market Towns for employment land as a priority and includes a specific action to work with Melton Borough Council to plan for the future growth of Melton Mowbray.

- In September 2015 the Cabinet considered a report on the development of a Melton Mowbray Transport Strategy and agreed the principle of supporting the strategic growth of Melton Mowbray through transport investment.
- In May 2016 the Cabinet agreed, inter alia, with the continued development of the Melton Mowbray Transport Strategy (MMTS) and authorised the Director of Environment and Transport to undertake the necessary consultations and negotiations to enable the definition of a preferred route for an outer relief road.
- In March 2017 the Cabinet agreed an indicative timetable for the NEMMDR business case. It authorised the Director to undertake further work to develop this and to identify a preferred route, including consultation to take place in summer/autumn 2017.
- In December 2017 Cabinet:
  - Noted responses to the consultation and evidence from the further work undertaken to develop the Outline Business Case for the northern and eastern sections of the Melton Mowbray Distributor Road (NEMMDR)
  - Authorised continued discussions with landowners and stakeholders, with a view to reaching voluntary agreement over the purchase and/or reservation of land for the northern and eastern sections of the NEMMDR
  - Reaffirmed its decision to prioritise and progress the development of the northern and eastern sections of the NEMMDR
  - Agreed the recommended route for the purposes of further development
  - Agreed finance arrangements, including an appropriate local contribution and forward-funding contributions to be provided by developers and/or third parties as necessary
  - Approved completion of all further work necessary to prepare the scheme for construction by spring 2020.
  - Authorised submission of the Outline Business Case.

4.9.13. As detailed in the Covering letter to the Business Case, the NEMMDR scheme is strongly supported by LCC and its Executive Team, Melton Borough Council and its Executive Team, and the Leicester and Leicestershire LLEP.

4.10 SUMMARY OF THE FINANCIAL CASE

4.10.1. The cost of delivering the Melton Mowbray Distributor Road, including allowances for risk and inflation will be **£115.251m** (including historic costs).

4.10.2. LCC and Melton Borough Council are making a local contribution of 39% towards the scheme costs, with a contribution of £49.47m from the Department for Transport towards the capital costs of the scheme. A £14m contribution to the scheme is anticipated from local developers.

4.10.3. A signed S151 Officer Letter (Appendix L) is provided that confirms cash-flowed use of private sector funding in advance of their receipt toward the scheme to deliver a total local developer contribution of £14m in recognition of its local importance to both LCC and Melton Borough Council.

4.10.4. A robust risk management strategy is in place to identify, quantify, manage and review risks; this has informed the scheme design and costing together with ECI involvement, alongside use of a QRA. Details of the risks identified can be found in Appendix K and further details of risk and contract management are also included in the Commercial and Management Cases respectively.

5

COMMERCIAL CASE

5 COMMERCIAL CASE

5.1 INTRODUCTION

5.1.1. This chapter outlines the commercial viability of the scheme; the procurement strategy outcome; the capability of the contracted service provider to deliver the scheme; and risk allocation and transfer.

5.1.2. Fundamentally, the commercial approach and its management by Leicestershire County Council (LCC) has been developed to secure best value through the procurement process and ensuring a strong, fair and open competition, in line with best practice for managing public money.

5.1.3. The outcomes that LCC have identified for successful delivery are:

- Achieve cost certainty, or certainty that the scheme can be delivered within the available funding constraints;
- Minimise further preparation costs with respect to scheme design by ensuring best value, and appropriate quality;
- Obtain contractor experience and input to the construction programme to ensure the implementation programme is robust and achievable; and
- Obtain contractor input to risk management and appraisals, including mitigation measures, to capitalise at an early stage on opportunities to reduce construction risk and improve out-turn certainty thereby reducing risks to a level that is 'As Low as Reasonably Practicable'.

5.1.4. LCC recognised the need to be clear at the outset what is to be bought and to test with the market to ensure commercial viability. As part of this, an Early Contractor Involvement (ECI) service for the proposed NEMMDR was appointed.

5.1.5. The ECI involvement led to an initial output specification which was designed to meet both the cost requirements and assist with future procurement specification in relation to what is required to be purchased as part of the procurement.

5.1.6. It also enabled the confirmation that the scheme is viable, with known market interest and detailed understanding of items to be procured as part of the procurement and commercial approach.

5.1.7. Carillion Tarmac Partnership (CTP) was appointed on a time defined basis through the Midlands Highways Alliance Medium Schemes Framework (MSF3) contract, however CTP subsequently collapsed, requiring another contractor to be appointed.

5.1.8. The second stage of the ECI was appointed through a mini competition across the full MSF3 framework pool (the preferred procurement route as outlined in the OBC) and is detailed further in subsequent sections.

5.2 PROCUREMENT ROUTE

5.2.1. At OBC stage, the selected strategy for procuring delivery partner services included the following:

- Midlands Highway Alliance Framework (MHA) as the preferred procurement route;
- NEC4 Option C - Target Cost with Activity Schedule;
- Risk Allocation and Transfer; and
- Programme for appointment of preferred delivery partner.

5.2.2. Since OBC, MHA has advanced to the Midlands Highway Alliance Plus (MHA+), which was formed in July 2020 as a successor the MHA originally formed in July 2007, through the merger of three regional efficiency groups, the Midlands Highway Alliance, the Midlands Service Improvement Group and the West Midlands Highway Alliance.

5.2.3. The new Alliance has a membership of 35 local highway authorities from across the Midlands and beyond. Similar to the MHA, the MHA+ operates 5 work streams including Medium Schemes, Term Maintenance, Professional Services, Assets, Standards and Commodities and Skills Community.

5.2.4. The use of the now MHA+ and the Medium Schemes Framework (MSF3) ensures long term relationship building, particularly in terms of well- known, recognised and understood processes, protocols and contractual terms between contractor and authority of how they work and what their processes under MHA+ awarded projects are.

5.2.5. This is particularly important in terms of risk, and risk allocation and transfer between parties. MHA+ has established contractual terms for these, and it is anticipated that the following division of risk will be applied to maximise local input to the process, whilst also achieving and incentivising on-time, on-budget and most efficient delivery mechanisms as detailed in the next section under contract management.

5.2.6. Early Contractor Involvement (ECI) was also a key feature of the design development at the previous stage informing risk, cost and programme.

5.3 SELECTED CONTRACTOR

5.3.1. Through MSF3, work can be awarded using one of the following options:

- **Option 1:** Direct call-off selection - based on quality criteria weighted to suit the work order, with price based on tendered prices for a similar model project or a selection of model projects;
- **Option 2:** Mini-competition - based on mini-competition (i.e. work is not sufficiently similar to one or more model projects or by client's choice); or
- **Option 3:** Sub-regional call-off - based on a model project for a geographical location, providing evidence based continuous improvement.

5.3.2. The appointed contractor for the NEMMDR, Galliford Try, was selected using Option 2 with a mini-competition held to determine which contractor from the MSF3 pool was to be appointed.

5.3.3. The use of a mini-competition to determine the appointed contractor required all invited parties to submit a mini-tender meeting the requirements in full by the stipulated deadline. These requirements were specified in a mini-competition invitation which was sent to all contractors within the MSF3 pool.

5.3.4. The mini-tender assessment was based on quality and price, with an overall 60:40 quality:price ratio used. LCC were then able to identify the most economically advantageous offer, with the quality:price ratio providing the best overall outcome from the mini-competition.

5.3.5. The mini-competition invitation included reference to:

- The contract data Parts 1 and 2 giving details for the particular work order;
- Details of any revisions to the specification that would apply to the works;
- A set of drawings deemed sufficient to identify the works required;
- A bill of quantities or activity schedule deemed sufficient enough to allow the contractors to provide an initial price;
- The timetable for completion of the works;

- Instructions including, for example, when and to whom the mini-tender had to be returned;
- The weighting for the cost and various quality criteria (including the extent to which tender stage scores are to be used) against which the mini-tenders would be evaluated; and
- Details of how the quality criteria would be assessed.

5.3.6. LCC evaluated all mini-tenders received, calculating the score for the quality criteria as outlined in the mini-competition invitation, and evaluating price by assigning the lowest price submitted the full price weighting (%) available, with all other prices being given a proportional percentage of the full weighting available.

5.3.7. The Galliford Try submission scored the highest aggregate score across price and quality and were issued with an instruction to follow the quotation procedure for the NEMMDR work order.

5.3.8. LCC subsequently entered a two-stage NEC4 Option C contract with Galliford Try, which included a secondary clause, X22, to enable ECI. Stage 1 of the contract (ECI-X22) allowed Galliford Try to provide a high degree of input into the early stages of the NEMMDR, enabling improved cost certainty through the development of a monthly programme and future forecasting, using Galliford Try's contractor experience.

5.3.9. This ECI has resulted in Galliford Try leading on a number of aspects of the project and has enabled LCC to carry out necessary advanced works to fulfil planning obligations, as well as conducting a comprehensive value engineering exercise in 2021.

5.3.10. With the NEC4 Option C contract being an open book, it has allowed LCC to agree a target cost and subsequent programme prior to entering into Stage 2 of the contract with Galliford Try. As part of this, Galliford Try provided LCC with a full breakdown of the target cost, including supply chain quotes and staff rates which has enabled LCC to be confident in obtaining value for money.

5.4 CONSTRUCTION CONTRACT DETAILS

5.4.1. The construction contract for the NEMMDR took the form of a standard NEC4 Option C contract with a target cost with activity schedule, as set out as the preferred option in the OBC.

5.4.2. The secondary clauses included as part of the contract include the following:

- X1 (Price Adjustment for Inflation);
- X2 (changes in the law);
- X10 (information modelling);
- X13 (performance bond);
- X18 (limitation of liability);
- X22 (early contractor involvement);
- Y(UK)2 (The Housing Grants, Construction and Regeneration Act 1996);
- Y(UK)3 (The Contracts (Rights of Third Parties) Act 1999)); and
- Z (additional conditions of contract).

5.4.3. The construction contract includes secondary clause X1 which adjusts the prices in accordance with a price adjustment factor. By including this secondary clause, the risk of inflation is transferred from the contractor to LCC.

5.4.4. Although it has traditionally been viewed as beneficial for LCC for the contractor to retain the risk of inflation, the recently high levels of inflation and inflation volatility would mean that the contractor would be exposed to a high degree of risk.

5.4.5. Despite forecasts indicating that inflation is reducing over the period of the scheme delivery[4], the heightened risk of inflation would result in a higher target price due to the contractor needing to include sufficient allowance for this risk within their target price. Removing this risk from the contractor therefore results in a lower price and better overall value for money, albeit at an increased risk to the council. This risk is appropriately included within the risk registers.

5.4.6. The inflation forecast by the BCIS shows heightened rates between March 2021 and March 2023, and forecasts continuing inflation in 2024, 2025 and 2026 at rates closer to the historical average, beyond which there is no further data available (outlined in Table 4-2 of the FINANCIAL CASE). The best mitigation available to the council is therefore to proceed with the scheme as quickly as is possible since the continuous effects of inflation over time will only cause the scheme costs to rise further.

5.4.7. The inclusion of secondary clause X22 allowed LCC to benefit from the advantages and efficiencies of ECI.

5.4.8. The financial risks are shared between LCC and the contractor through the pain/gain mechanism. As part of the contract, the contractor is incentivised through a pain/gain mechanism to reduce costs as they will receive a share of the saving. All risk is incentivised. Likewise, should costs increase beyond the target price, the contractor will have to share the burden.

5.4.9. This pain/gain share will form part of the contract terms and gained/levied against the contractor if the works run beyond the completion date shown in the accepted programme.

5.4.10. The contractor will be incentivised to beat the target cost as they will benefit from the savings as indicated in Table 5-1.

Table 5-1 - Contractor's Share Percentages Share Ranges Through the Pain/Gain Mechanism

Share range	Contractor's share percentage
Less than 80%	30%
From 80% to 110%	50%
Greater than 110%	100%

5.4.11. Through the use of the MHA+ and MSF3, which was selected as the preferred procurement route outlined in the OBC, all contracts are required to complete a monthly toolkit, comprising of a minimum of 10 core KPIs, including 'Cost Management', and hence included within the construction contract.

5.4.12. These KPIs are factored into the Framework quality scores and affect allocation of future works on the Framework. All KPI scores, for every contract allocated under MSF3, are presented at regular Framework Community Board meetings for discussion amongst all contactors and local authorities.

[4] BCIS General Civil Engineering Cost Index published by the Royal Institute of Chartered Surveyors

5.4.13. Table 5-2 outlines the KPIs in which the contractor will be assessed against.

Table 5-2 – Contractor KPIs

KPI	Purpose	Factors
Product	To determine the overall level of client satisfaction with the completed product	Construction of main works; handover, acceptance, inspections and as-built records; post-project review; risk & opportunities register; sustainable construction, minimising waste creation and maximising recycling and opportunities plan.
Service	To determine the overall level of Client satisfaction with the service of the supplier during the project. To ensure that the Supply Chain receive prompt payment	Organisation and management; procurement of specialists and suppliers; supply chain; management and improvement of Client relationships; management and improvement of customer and third-party relationships; innovation and value for money; management of change; collaborative working.
Right first time	To assess the impact on the Client of any defects and reworking.	Avoiding defective works; quality management system.
Cost management	To measure the accuracy of cost predication and reliability of cost control. To measure the accuracy of cost predication of change.	Ensuring accurate estimating and forecasting, predictability of cost, and accuracy of cost and payment records.
Time	To measure the reliability of time estimates for both design and construction.	Reliability of programming; predictability of time.
Safety	To measure health and safety aspects on the project.	Health, welfare and development of the workforce; compliance with safety legislation and regulations; safety of the public.
Social Value	To monitor the engagement with the ESP to help ensure successful of skills development against the Employment and Skills Plan (ESP). To measure the success of skills development against the Employment and Skills Plan (ESP). To provide an overall measure of the social, economic and environmental benefits for the	New entrant's skills development, existing workforce skills development, progression into employment.

	local area the scheme is delivered within.	
Community	To measure how the impact of projects on the local community is minimised before, during and after completion.	Customer Care, working with the local community, Considerate Constructor.
Traffic management	To measure the success of minimising the impact of projects on highway users through appropriate traffic management.	Disruption and congestion, all highway users' considered, appropriate and up to date information for highway users, safety of measures.
Innovation and Value for Money	To measure the success of innovation through cashable and non-cashable efficiency savings and, demonstrate ongoing value for money.	Continuous improvement through Contractor and supply chain, early Contractor and Supplier involvement, opportunities plan, innovation and value for money.
Commissioning Authority Performance	To measure the approach of the Commissioning Authority in respect of the outcomes established by the MHA. To measure the commitment of the Commissioning Authority to support the Contractors to ensure that representatives attending site can do so safety and effectively. To ensure that the Tier 1 Contractors receive prompt payment to facilitate cashflow and demonstrate commitment to the outcomes established by the MHA.	
MHA Framework Community Performance		

5.5 DESIGN ORGANISATION

5.5.1. AECOM were retained as the design organisation to produce:

- The Detailed Design;
- Environmental Impact Assessment (EIA) documentation; and
- Input to the Planning and Compulsory Purchase Order process.

5.5.2. LCC initially appointed AECOM through the Professional Services Partnership (PSP) 2 as part of the Midlands Highways Alliance, which has since advanced to the MHA+. The retainment of AECOM was facilitated through PSP3 which is a follow on from PSP2 as part of the MHA+ and provides a more robust commercial model with firm scope of works.

5.5.3. Given the stage of the project the importance of continuity in delivery was critical, it was not considered desirable to transfer the design role to an alternative supplier.

5.6 PAYMENT MECHANISMS

5.6.1. Under the current MSF3 / NEC4 Option C Contract the contractor is required to submit an application for payment to the Project Manager before the month-end assessment date.

5.6.2. The Project Manager will then certify payment within one week of the assessment date and payment is due to the contractor within a further two weeks.

5.7 RISK ALLOCATION AND TRANSFER

5.7.1. At a project level, risks are managed by the Project Board however the Commercial Case describes how the Midlands Highway Authority procurement strategy places risk with the party best placed to manage or mitigate that risk or manage the consequences should they transpire.

5.7.2. A strategic aim and objective of the MHA+ framework and LCC's management of the contract is that risk is appropriately proportioned through the careful management of relationships within, and throughout the project.

5.7.3. Since appointment of the contractor, Galliford Try, priced risk registers have been produced and can be found in Appendix K, with each risk/opportunity being allocated an owner and appropriate resolutions sought to mitigate or eliminate the risk where possible.

5.7.4. The allocation of risks and associated owner is summarised in Table 5-3 below (Public sector represents the Council / Government Treasury and the private sector the consultants and contractors).

Table 5-3 - Risk Allocation & Transfer

Risk Category	Public	Private	Shared
Design risk		✓	
Inflation risk	✓		
Construction risk			✓
Transition and implementation risk			✓
Operating risk	✓		
Termination risks			✓
Financing risks	✓		
Legislative risks	✓		

5.8 CONTRACT MANAGEMENT

5.8.1. LCC acts as Project Manager and administer the contract unless the role is delegated to another party acting on behalf of the employer. The Project Manager has the designated authority to issue all instructions, notifications and other communications required under the contract.

5.8.2. Dedicated and experienced resources have been allocated by LCC in relation to contract management, which will be managed by Dave Collis, Jonny Barron and Declan Morgan.

HUMAN RESOURCE ISSUES

5.8.3. No significant human resources issues have been identified that could affect the delivery of the scheme. Further details of the required capabilities and assigned LCC and Senior Supplier resources are set out in the Management Case.

5.8.4. The skills required to deliver the scheme are already engaged and committed to NEMMDR.

5.9 SUMMARY OF THE COMMERCIAL CASE

5.9.1. The preferred procurement from OBC was implemented with LCC utilising the MHA+ (then the MHA) and the Medium Schemes Framework (MSF3). The appointed contractor for the NEMMDR, Galliford Try, was selected using Option 2 with a mini competition held to determine which contractor from the MSF3 pool was to be appointed.

5.9.2. The contract took the form of a NEC4 Option C - Target Cost with Activity Schedule, with the financial risks shared between LCC and the contractor through the pain/gain mechanism, which forms part of the contract.

5.9.3. The contractor is incentivised to reduce costs as they will receive a share of the saving. All risk is incentivised. Likewise, should costs increase beyond the target price, the contractor will have to share the burden.

6

MANAGEMENT CASE

6 MANAGEMENT CASE

6.1 INTRODUCTION

6.1.1. The Management Case assesses whether a proposal is deliverable. It describes the project planning, governance structure, risk management, communications and stakeholder management, benefits realisation and assurance.

6.1.2. The Management Case for the North and East Melton Mowbray Distributor Road (NEMMDR), detailed in this Chapter, outlines how scheme is capable of being delivered successfully in line with the recognised best practice. It describes the processes that Leicestershire County Council (LCC) have put in place to ensure that the project is effectively delivered.

6.1.3. The Management Case also sets out the Benefits Realisation and Monitoring and Evaluation Plans that LCC have developed to ensure that the benefits set out in the Strategic and Economic Cases are realised and will include measures to assess and evaluate this.

6.1.4. The Management Case for the NEMMDR is discussed under the following headings:

- evidence of similar projects;
- project dependencies;
- the governance structure (management framework);
- programme and project plan;
- the communication and stakeholder management process (how stakeholders have been identified, and their influence on the project managed);
- the risk management process;
- how the benefits set out in the Strategic and Economic Cases will be monitored and realised; and
- monitoring and evaluation.

6.2 EVIDENCE OF SIMILAR PROJECTS

PROMOTOR EXPERIENCE

6.2.1. LCC has successfully procured and delivered a number of projects of varying sizes and complexity. Some of the key and most recent projects delivered include:

- Loughborough Inner Relief Road & Town Centre Improvements (£17.2m) 2015
- A46 Anstey Lane Dualling (£10.2m) 2020
- M1 J23 & A512 Improvements (£26.9m) 2021
- Earl Shilton Bypass (£22.76m) 2009
- M1 Bridge to Growth (£15m) 2016

6.2.2. Importantly, each of these have been delivered to time, and within budget.

6.2.3. The M1 Bridge to Growth scheme and Earl Shilton Bypass, both involving significant structures work and risk, are particularly relevant, with many of the internal project and contract management practices used on those schemes also being applied to deliver the NEMMDR scheme (for example: experienced personnel, and a similar, but expanded, project structure).

6.2.4. Midlands Highway Alliance Plus (MHA+) was formed in July 2020 as a successor the Midland Highway Alliance (MHA) formed in July 2007, through the merger of three regional efficiency groups, the

Midlands Highway Alliance, the Midlands Service Improvement Group and the West Midlands Highway Alliance.

6.2.5. The new Alliance has a membership of 35 local highway authorities from across the Midlands and beyond. Similar to the MHA, the MHA+ operates 5 work streams including Medium Schemes, Term Maintenance, Professional Services, Assets, Standards and Commodities and Skills Community.

6.2.6. The MHA and its partners have previously been recognised on multiple occasions in major industry events including:

- Winning Team Achievement Award at the Institution of Civil Engineers (ICE) East Midlands Merit Awards in both 2016 and 2018 in recognition for their Medium Schemes (MSF2) and Professional Services Partnership 2 (PSP2) Frameworks' success in delivering a wide range of projects for MHA members, many in combination with LCC.
- At the NEC Awards 2018, the MHA received a Highly Commended award in the NEC Client of the Year category, which recognises excellence in project delivery and showcase examples of good practice through collaboration with partners.

6.2.7. Both LCC and MHA have developed significant experience in terms of major infrastructure projects, and it is the same teams being deployed for the NEMMDR scheme.

6.2.8. Opportunities will be taken, wherever possible, to improve delivery processes by acting upon the lessons learnt from recent schemes, particularly the M1 Bridge to Growth and Earl Shilton Bypass including:

- A high level of good cooperation and efficiency by all involved is required for a successful bid document and reduces the potential for legal issues later in projects while good communication from the outset can result in legal agreement issues being resolved quickly;
- Where applicable, changes within the design process are appreciated as early as possible and there is an understanding that there is in general a reluctance to change further into the detailed design stage;
- A strong emphasis in the public consultation process is important to help ease tensions and avoid political pressure especially from local residents regarding noise, dust and visual intrusion;
- Provision of meetings and discussions during the ECI stage along with risk workshops help to mitigate risks and should be held as part of both the ECI and CDM Health & Safety processes;
- Significant appreciation of anticipated risks and the unforeseeable risks require good management. Consideration of risks at meetings and discussions should be undertaken during the ECI stage along with risk workshops to mitigate risks as part of both the ECI and CDM Health & Safety processes.

6.2.9. Table 6-1 sets out the scope of the works, costs, timescale and procurement route for the schemes identified above. Two of the projects, the Loughborough Inner Relief Road & Town Centre Improvements and the M1 Bridge to Growth used the Midland Highway Alliance MSF1 and MSF2, which are the same routes used for this project, to maximise consistency and previous experience to ensure on-time and budget delivery through leveraging known and effective management processes.

Table 6-1 - Examples of Similar Schemes Managed & Delivered by LCC

Scheme Title	Scheme Description	Costs	Construction Timescales	Procurement Strategy
Loughborough Inner Relief Road & Town Centre Improvements	Completion of the remaining section of Loughborough Inner Relief Road and upgrading junctions on the existing relief road to carry traffic flow diverted from the closed A6. Improvements to related junctions on the Loughborough A6004 Ring Road to help reduce traffic demand on the relief road and the town centre road network. Closure of A6 Swan Street/Market Place and an improved pedestrian environment to help combine the shopping and commerce areas in the heart of the town centre. Provision of new high-quality bus waiting/interchange facilities both in High Street/Baxter Gate and The Rushes/Derby Square areas.	£17.24M	Construction started in Feb 2013 and was completed in May 2015. Delivered on time and to budget	MHA MSF1
Earl Shilton Bypass	The Bypass is a 5km long, 7.3m wide single carriageway with one-metre-wide hard strips alongside. Quiet road surfacing material has been used throughout its length. A combined footway/ cycleway 2.5 metre wide has been provided along the length of the Bypass with connections to the existing cycle facilities along the Hinckley Northern Perimeter Road and to the side roads at each junction.	£22.76M	Construction started in Sep 2007 and was completed in March 2009 due to great crested newts during construction (no evidence in extensive pre works surveys).	Competitive tender
M1 Bridge to Growth	£15.0m project that was jointly funded from the New Lubbesthorpe landowner (£10.0m) with HCA Large Infrastructure Funding and Department for Transport Local Pinch Point Fund (£5.0m). The bridge was built over a 19-month period and provided	£15M	April 2015 – Nov 2016 (on programme and to budget)	MHA MSF2

	early access to development land to accelerate the delivery of the primary infrastructure and development of 4,250 homes.			

6.2.23. The specific experience of LCC in terms of contract management and focussed on the key risk items of relevance to the NEMMDR scheme is shown for these more recent projects below, along with other schemes that have also been delivered over the past decade.

Table 6-2 - Experience in relation to NEMMDR Requirements

NEMMDR Requirement/ LCC Contract and Risk Management Experience	M1 Bridge	Loughborough Inner Relief Road	Earl Shilton Bypass	Enderby Park and Ride and Birstall Park and Ride	A511 corridor	Syston Northern Bypass
ECI	Y	Y	Y	Y	Y	
New standard carriageway	Y	Y	Y	Y	Y	Y
Roundabout junctions	Y		Y		Y	Y
Culverts/bridge over water	Y		Y			
Rail bridge						Y
Major earthworks	Y	Y	Y	Y	Y	Y

CONTRACTOR EXPERIENCE

6.2.24. Galliford Try were appointed through the Midlands Highways Alliance Medium Schemes Framework contract to work with LCC and their designers, AECOM, in a two-stage NEC4 Option C contract, which allowed for ECI service for the proposed NEMMDR. The selection of the contractor is discussed within the Commercial Case.

6.2.25. Galliford Try have worked with a number of clients under various ECI and construction arrangements, successfully delivering infrastructure projects, either through formal ECI arrangements with responsibility for the design and delivery of the Statutory Planning Process, or an informal supporting role to the client.

6.2.26. Table 6-3 below highlights the specialist requirements of the NEMMDR project and similar schemes that Galliford Try have gained on relevant project examples, demonstrating Galliford Try's position to add value to the NEMMDR project prior to construction tender and award.

Table 6-3 - Experience in relation to NEMMDR Requirements

NEMMDR Requirement	Lincoln Eastern Bypass	Grantham Southern Relief Road	A52 Wyvern Transport Improvements	Rugby Radio	A47 Guyhirn
ECI	✓	✓	✓	✓	✓
New standard carriageway	✓	✓	✓	✓	✓
Roundabout junctions	✓	✓	✓		✓
Culverts/bridge over water	✓	✓		✓	✓
Rail bridge	✓	✓			
Major earthworks	✓	✓	✓	✓	✓

6.2.27. The use of ECI arrangements has been proactively used by LCC on the MHA+ framework in the development, understanding and management of key risks associated with the project at an early stage, and has helped provide significant advantages in relation to the following points:

- Adopting a structured approach and focussing on programme and delivery implications of key risk items, and how they can be mitigated, avoided and/or reduced;
- Setting clear goals and taking timely decisions;
- Investing time and money proportionate to likely returns;
- Including potential suppliers and sub-contractors in decisions at an early stage; and
- Ensuring good communications and building trust with all stakeholders.

CONSULTANTS - DESIGN AND SPECIALIST ADVICE

6.2.28. AECOM has more than 100 years of experience managing and delivering highway projects for both government and private industry. They bring the experience, confidence, and a track record of successfully delivering recent schemes including A1 Morpeth Bypass, A5-M1 Link Dunstable Northern Bypass, M6 J10a to 13 Smart Motorways, A46 Newark to Widmerpool and A52 Nottingham Junctions. For the NEMMDR, AECOM have provided highways design and support services including, environment, structures and geotechnics, largely delivered from their Chesterfield and Nottingham offices. Their dedicated project resources are underpinned by a national resource of over 1800 transportation staff, providing a flexible and scalable resource to meet demands.

6.2.29. WSP work with government, local authorities and leading contractors to drive efficiency and innovation for public sector clients. A trusted partner to National Highways, WSP deliver cost-effective improvements to England's Strategic Road Network within challenging social, political, fiscal and time constraints. Innovative projects undertaken by WSP include the M25 widening (J27-30) and the A35 Weymouth Roundabout improvements. Working with local authorities such as Northamptonshire

County Council, WSP manage and improve local roads, through the provision of new infrastructure and routine maintenance services, achieving cost savings, reduced carbon emissions and improved public satisfaction. WSP provide strategic advice to LCC along with producing the Business Case document suite.

6.2.30. Both consultants, and respective teams are well known to LCC and have a proven track record in accelerating scheme delivery and identifying critical risks and critical path activities to meet programme.

6.3 PROJECT DEPENDENCIES

6.3.1. This section of the Management Case describes the internal and external factors upon which the scheme depends. It summarises the known project dependencies and how they relate to the scheme and their potential to affect its delivery.

RELIANCE ON OTHER PROJECTS

6.3.2. While the NEMMDR can be delivered independently of any other highway infrastructure schemes or development, it does form part of the wider Melton Mowbray Transport Strategy (MMTS).

6.3.3. The MMTS will enable the benefits of the scheme to be enhanced, enabling delivery of schemes that support access to and regeneration of the town centre: schemes to promote the active modes, improvement in public transport to enhance service coverage and patronage, and local traffic management measures to improve safety in the town centre and local roads.

6.3.4. There is synergy between the NEMMDR scheme and the planned MMDR Southern Link which will serve the Southern Sustainable Neighbourhood, both referenced within the MMTS and Melton Local Plan. The Southern Link is being delivered through the Housing Infrastructure Fund and in December 2021 an agreement was concluded to fund the Southern Link, with LCC expecting to receive up to £18.2 million from Homes England towards the total cost of £37.5 million. For the HIF funding to be released, approval for the NEMMDR needs to be in place and passed through the FBC approval process.

6.3.5. The addition of the Southern Link will lead to a further reduction in through traffic in Melton Mowbray, bringing additional benefits through a further reduction in congestion on the local network and supporting housing delivery, with the A607 through the town reclassified.

6.3.6. At this time, the timeframe for delivery of the Southern Link assumes the formal planning process will begin in January 2023, with on site work starting in March 2024 and the road opening in October 2025.

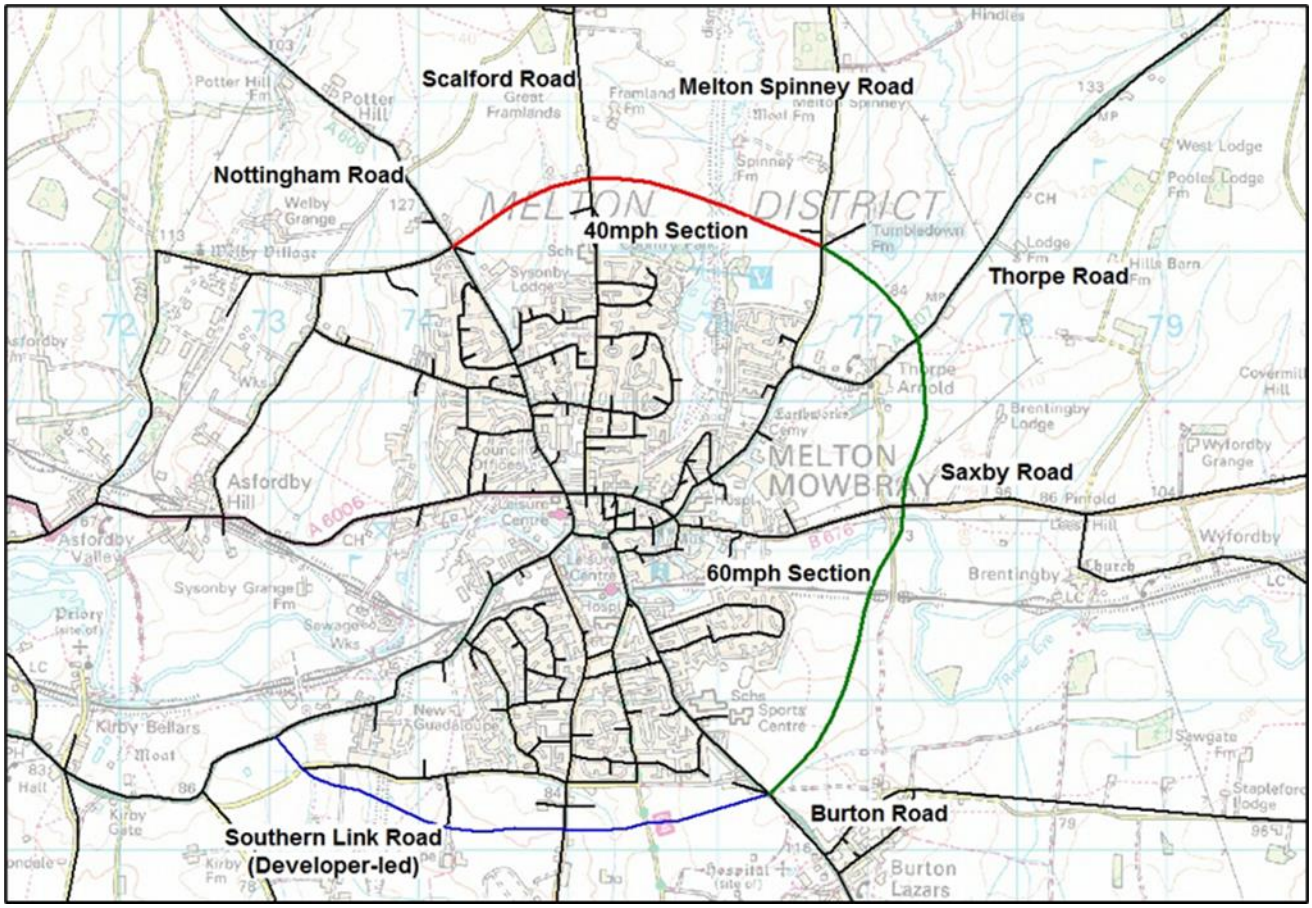
LEGISLATION

6.3.7. Since submission of the Outline Business Case (OBC) in December 2017, the scheme has progressed in receiving all approvals from a legislative perspective including:

- Adoption of the Melton Local Plan – the Local Plan was adopted in October 2018 which includes reference of the NEMMDR being a crucial element for the town's transport strategy and key enabler of delivery of housing allocation;
- A planning application for the NEMMDR was submitted in October 2018 and subsequently granted in May 2019; and
- After a Public Inquiry from September – October 2021, the proposed Compulsory Purchase Order (CPO) and Side Roads Order (SRO) notices were confirmed and granted in March 2022.

6.3.8. The scheme includes six new junctions to connect the proposed distributor road to the existing road network, these are shown within Figure 6-1.

Figure 6-1 - NEMMDR and Junction Locations



PLANNING APPROVAL

6.3.9. A planning application for NEMMDR was submitted in October 2018 and subsequently granted in May 2019 (reference 2018/Reg3Ma/0182/LCC), subject to conditions; some of which are listed below. The full list of conditions can be found in Appendix M:

- **Construction Commencement** - The development shall be commenced within 3 years from the date of the permission; this has already been met with LCC beginning works through demolition of Sysonby Farm, which is owned by LCC.
- **Operational hours** — Apart from some exemptions no operations shall be carried out at the site except between the following times: 0700 hours and 1900 hours Monday to Friday; and 0800 hours and 1300 hours Saturday. There shall be no operations on Sundays or public or bank holidays.
- **Ecology** — Prior to commencement of construction works, a detailed Construction Environmental Management Plan (CEMP) shall be submitted to and approved in writing by the County Planning Authority.
- **Landscaping** — The planting of all trees, wildflower grassland, scrub, hedgerows and marginal aquatic vegetation shall be locally native species. Final landscaping plans shall be submitted to and approved by the County Planning Authority prior to implementation of the landscaping works and provide for a biodiversity net gain.

- **River Eye** — The scheme shall make provision for compensatory habitat creation including its management and monitoring and shall be implemented as approved. Thereafter, the development shall be implemented in accordance with the approved scheme.
- **Materials** — The road shall be constructed utilising a low road noise surface material as proposed in the submitted application.
- **Flood risk** — The development hereby permitted shall not be commenced until such time as a scheme to provide compensatory floodplain storage. It has been submitted to, and approved in writing by, the County Planning Authority.

SUCCESSFUL APPROVAL OF STATUTORY ORDERS

6.3.10. The CPO and SRO notices for the NEMMDR were submitted to the Secretary of State for confirmation on 21 October 2020. However, several objections were received and subsequently a Public Inquiry was called to consider the objections on 15th January 2021.

6.3.11. The NEMMDR Public Inquiry was opened by the Inspector on 21st September 2021 and closed on Thursday 7th October 2021.

6.3.12. Between the call for the Public Inquiry and its opening, a number of minor modifications were required to the CPO and SRO which were necessary to ensure accuracy, consistency as well as to address some concerns raised by landowners. The modifications did not comprise any increase in the land required for the scheme and the relevant parties were consulted.

6.3.13. In total, there were initially 22 objections, which reduced to 12 as the inquiry concluded.

6.3.14. It was announced on 31st March 2022 that the proposed CPO and SPO (including modifications) had been confirmed.

STAKEHOLDER SUPPORT

6.3.15. Stakeholders for the project include Leicestershire County Council, Melton Borough Council, the other Leicestershire district councils, Leicester and Leicestershire LEP, the Federation of Small Businesses, the Southern Developers, the Northern Developers, the appointed contractor (Galliford Try), National Highways and the DfT.

6.3.16. This is alongside key businesses in the town, bus operators, schools, ward members, parish councils, small landowners and the local residents.

6.3.17. Consultation to date has identified strong local support for a distributor road, and workshops with key stakeholders have informed the Transport Strategy Evidence Base, and Options Assessment Report.

6.3.18. As part of the consultation process, LCC held a public consultation to present the recommended route and request feedback on the scheme. The consultation period ran from 2 September 2017 to 15 October 2017.

6.3.19. At the time, a total of 226 responses were received on the consultation. Responses were received from across the Melton Borough scheme area and beyond.

6.3.20. Responses were received from a broad range of residents, based on analysis of the demographic questions on the consultation questionnaire. Most residents travel into or through Melton Mowbray on a weekly basis (92%). The majority of respondents (88%) were car drivers and reside in the local area (88%).

6.3.21. The majority of the comments made in relation to the scheme were positive (71%), 18% were negative and 11% were neutral.

6.3.22. Further detail on the relevant stakeholders as well as consultation and support can be found in the Strategic Case.

6.4 PROJECT GOVERNANCE, ORGANISATION STRUCTURE AND ROLES

6.4.1. The governance structure established by LCC for delivery of the NEMMDR is described below. This follows an established structure that has been used by LCC for successful delivery of previous schemes, including those identified in the previous local experience (see Table 6-1). LCC also benefit from experience gained from other neighbouring authorities of local major schemes through hosting other MHA+ Framework Boards.

6.4.2. The Project Governance Structure for the NEMMDR scheme consists of a three-tier structure, as it forms part of the overall Melton Mowbray Transport Strategy (MMTS) and is linked to wider projects under the MMTS umbrella. The three tiers are as follows:

- **The Melton Mowbray Transport Strategy Programme Board** – Provides an overview at a strategic level in relation to Melton Mowbray Transport Strategy.
- **The NEMMDR Project Board** – Provides governance for the specific NEMMDR Project and is the decision-making body for the purposes of delivery of the scheme. Other project boards will be established to cover other projects under the overall MMTS umbrella, including the identification and development of the wider elements of the transport strategy.
- **Delivery Teams** – Responsible for product delivery collaboratively between consultants, contractors and LCC staff.

6.4.3. The proposed structure breaks the overall project down along the following lines:

- High-level, strategic governance related to the strategy alongside more detailed work relating to delivery of specific schemes.
- Governance related to the NEMMDR specifically alongside work on the transport strategy and the wider (i.e. non NEMMDR) schemes/measures which emerge from the strategy.

6.4.4. As other schemes/measures emerge from the work to develop the wider transport strategy and are taken forward for delivery, proportionate governance structures will be established (potentially including additional project boards) to oversee these as required, albeit still within the overall MMTS programme.

6.4.5. The roles and responsibilities of each of the tiers of the governance structure are covered in more detail in the following sections.

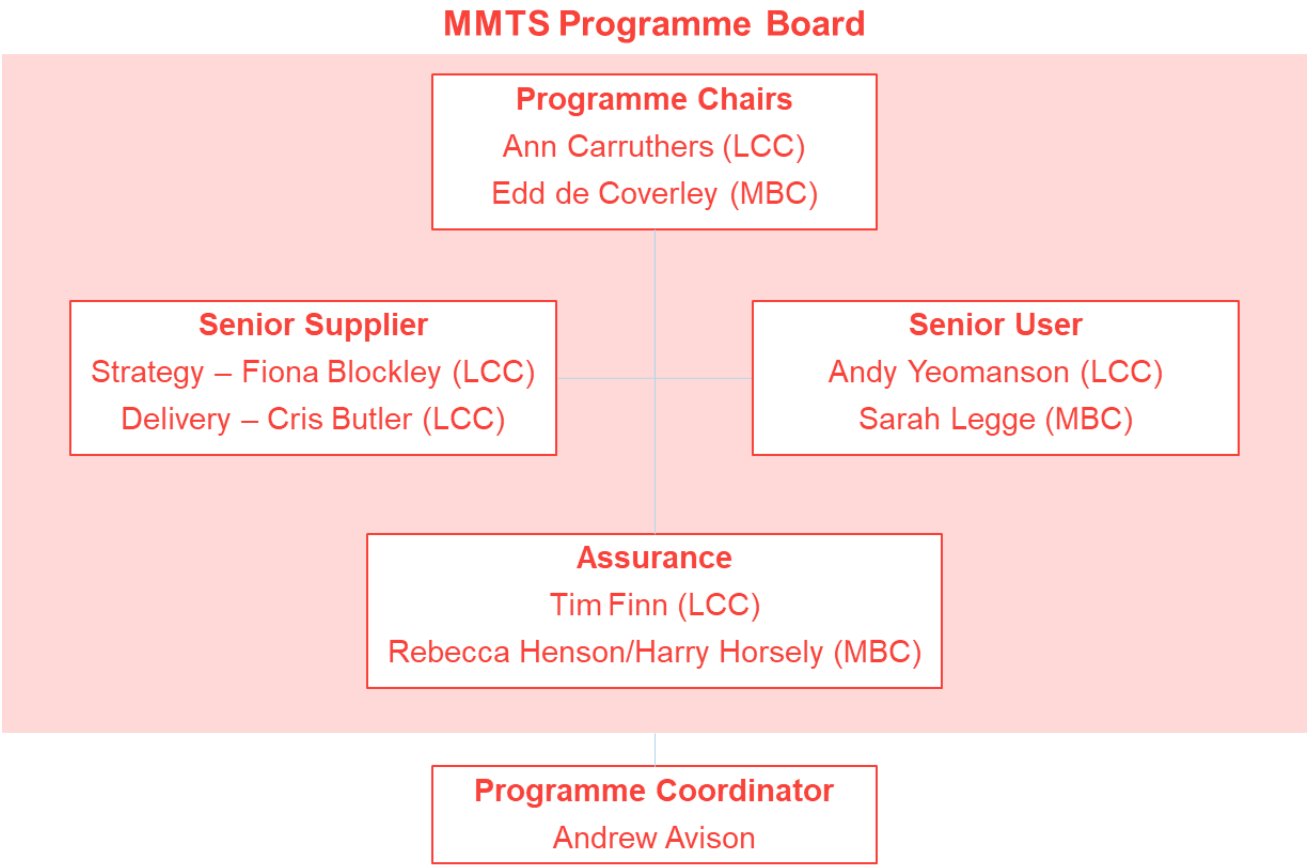
MMTS PROGRAMME BOARD

6.4.6. MMTS Programme Board is at the top of the structure and provides:

- A strategic steer and overview, monitoring programme-wide progress of the overall MMTS;
- Overall MMTS projects programme, including high-level milestones and budgets for component projects;
- An overall Programme Coordinator, Andrew Avison, reports to the Programme Board, who receives written reports from the NEMMDR Project Manager prior to Programme Board meetings.

6.4.7. The composition of the MMTS Programme Board is set out in Figure 6-2 below.

Figure 6-2 - Composition of the MMTS Programme Board



6.4.8. The MMTS Programme Board meets as and when required. Andrew Avison acting as the Programme Coordinator has specific responsibility within the Council for northeast Leicestershire and Melton; Andrew has developed an in-depth understanding of the local area, he has had direct involvement in the NEMMDR scheme from inception, so has an intimate knowledge of the scheme background and supporting evidence base.

6.4.9. Ann Carruthers from Leicestershire County Council and Edd de Coverley from Melton Borough Council undertake the role of Programme Chairs. LCC's head of Transport Policy Andy Yeomanson and Sarah Legge undertake the roles of senior users.

6.4.10. Project assurance covering finance and strategy will be undertaken by Tim Finn, Rebecca Henson and Harry Horsely from a transport planning and development perspective.

THE NEMMDR PROJECT BOARD

6.4.11. The NEMMDR scheme is delivered through the NEMMDR Project Board. The Board represents a continuation of invested knowledge and ability to make key, important decisions quickly. Some changes in personnel are expected as the scheme transitions to contractor and scheme delivery compared to the current phase (which is shown in Figure 6-3).

6.4.12. The Board is already established and has been meeting monthly since the beginning of 2017 to finalise the scheme development and design, and progress the detailed design, planning, orders, procurement and FBC stage for delivering the NEMMDR. The Project Board will continue to meet to

progress subsequent stages and prepare for and support construction (subject to receipt of funding for the scheme).

6.4.13. The NEMMDR Project Board will support the Senior Responsible Owner for the NEMMDR project (Janna Walker) in providing overall direction and management for the project and by making key decisions including commitment of resources.

6.4.14. The NEMMDR Project Board is responsible for, and will have direct decision-making powers over:

- Managing progress against the project plan;
- Agreeing/quality assuring key project products; these are usually relatively process focussed and are concerned with project level plans, communications and HR transition planning;
- Managing project risks;
- Managing project finance;
- Managing dependencies between the NEMMDR and other projects (including in the MMTS);
- Committing (or sourcing from elsewhere) resources required by the project to enable the activities to be successfully achieved; and
- Ensuring a reciprocal line of communication between the NEMMDR Project Board and the MMTS Programme Board.

KEY ACHIEVEMENTS TO DATE

6.4.15. The Project Board has delivered several key achievements to date of which are summarised below:

- The CDM design review conducted on 11th October 2020 and the DHAR updated.
- Management of communications and stakeholder engagement; including agricultural surveys and interviews; regular ongoing meetings with Natural England;
- Archaeology WSI submitted to LCC Planning archaeology; scoping report has been submitted to planning for LCC comment; a series of meetings with North Sustainable Neighbourhood Consortium developers to discuss alignment; various meetings with landowners;
- Delivery of OBC – including supporting analytical work;
- Public Consultation for the scheme;
- CPO, SRO and a Public Inquiry has been successfully completed to secure planning consent; and
- Oversight and challenge on key project risks, programme dependencies and the prioritisation of critical path activities to ensure that each of the above has been delivered on time, and within existing budgets.

PROJECT BOARD MEMBERS AND ROLES

6.4.16. **Janna Walker** is the **Senior Responsible Owner (SRO)** for the NEMMDR Project. Janna holds a Bachelor of Law degree and is a member of the Transport Planning Society. Janna has over 10 years' experience in highways and transport with the majority focused on strategic transport policy and delivery of major capital schemes, including the successful delivery of the A46 Anstey Lane and A512 / M1 Jct23 schemes, valued at approximately £10m and £27m respectively. Janna's responsibilities include:

- Project direction;
- Monitor and control project plan;
- Monitor financial expenditure;
- Monitor and review project controls; and
- Organise / Chair the Project Board.

6.4.17. **Adam Lakin**, who is part of the Asset and Major Programmes team at LCC, is the **Lead Project Manager**. Adam holds a Master of Science degree in Construction Project Management and is a member of the Institute of Highway Engineers. Adam has over 15 years' industry experience, approximately half of which has been focused on scheme delivery for, or on behalf of, local authorities. Adam has successfully delivered schemes of various scales including the £2.1m A634 Safer Roads Scheme and the £49m A6211 Gedling Access Road and was also the lead project manager for the £193m North Hykeham Relief Road. Adam's responsibilities include:

- Overarching project management;
- Implementation of the project plan;
- Management of risk and financial expenditure;
- Management of change within approved limits;
- Reporting to and requesting decisions from the Project Board; and
- Returns to the DfT.

6.4.18. **Alex Taylor**, who is part of the Asset and Major Programmes (AMP) team at LCC is a Project Manager for the NEMMDR Project. Alex holds a Master of Science (Engineering) degree in Transport Planning and Engineering and is an Engineering Technician Member of the Institute of Civil Engineers. Alex has over 20 years of highways experience, including project management of small and medium local authority schemes, design, consultation, accident investigation and road safety audit. Alex has worked in the AMP team since 2016 delivering major projects including the M1 Bridge to Growth, M1 Junction 23 and A512 Improvements, early work on the MMDR South Link, and has been involved in the NEMMDR since its inception. Alex's responsibilities include:

- Supporting the Lead Project Manager in the delivery of all duties listed above;
- Lead for communications and stakeholder engagement;
- Gateway Reviews; and
- Financial Monitoring Lead.

6.4.19. As described in the Commercial Case, dedicated and experienced resources have been allocated by LCC in relation to contract management, which will be managed by Dave Collis, Jonny Barron and Declan Morgan, whom will also support the project board.

6.4.20. **Dave Collis,** who is part of the Engineering Services team at LCC, is the NEC4 Project Manager for the NEMMDR Project, with 30 years' experience in the highways industry, in both public & private sector. Recent projects include LIRR & Town Centre (£8.5m), LNWMTP (£9.0m) and M1 J23 and A512 Improvements (£22.0m). Dave's responsibilities will include:

- NEC4 Project Manager;
- Contract Management; and
- Site Based Construction Support.

6.4.21. **Jonathan Barron,** is a **Senior Engineer** who is part of the Engineering Services Team at LCC for the NEMMDR Project. Jonathan holds a Master of Architecture and Environmental Design degree, is a graduate member of the Institution of Civil Engineers and member of the Chartered Management Institute with over 10 years' experience in the highways industry, predominantly working for local authorities. Previous projects include Hucknall Town Centre Bypass (£13.5m) and Nottingham City Electric Bus Park & Ride (£3.5m). Main responsibilities will include:

- Project management support;
- Commercial support; and

- Technical support.

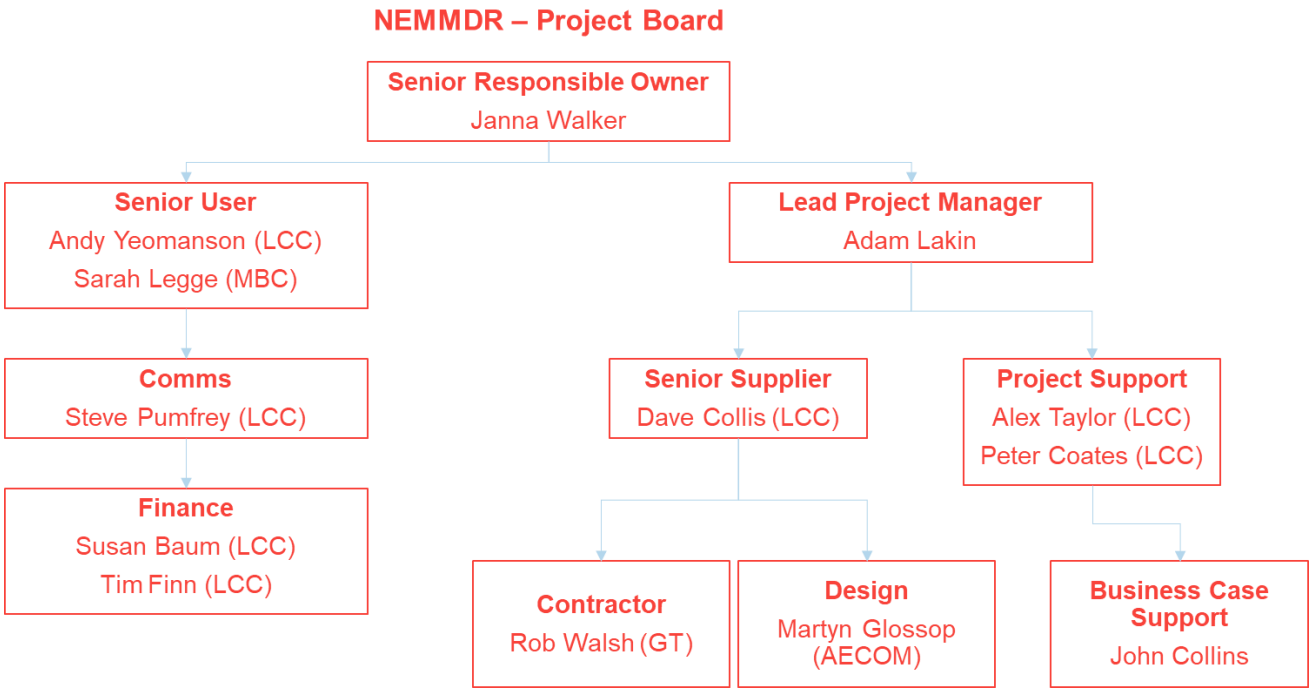
6.4.22. **Declan Morgan** is the Commercial Manager for the NEMMDR Project. Declan has over 38 years commercial experience in the highways industry working mainly in the public sector for a variety of both client and contracting organisations. Project experience includes M25 Maple Cross to Tatling End (£25m), Kettering bypass (£31m) TfL Highways Maintenance Contract 2007-13 (£40m p.a.) and Buckinghamshire Term Service Contract (£35m p.a.). Main responsibilities will include:

- Provide support on NEC contract commercial matters;
- NEC contract management and administration; and
- Provide advice and support on all contract cost and value management.

6.4.23. The composition of the NEMMDR Project Board, and delivery team are set out in Figure 6-3.

6.4.24. Board meetings occur monthly. Where the need arises to discuss issues or exceptions, meetings may be called more regularly.

Figure 6-3 - NEMMDR Project Board



DELIVERY TEAM

6.4.25. The NEMMDR Project Delivery Team (Figure 6-4) has a proven track record of previous delivery with the local and broader expertise to effectively deliver to the programmed timescales.

6.4.26. Given the recent completion of the M1 Bridge and Lubbesthorpe SES schemes, the capacity of the group, along with links to other LCC officers, District Council officers and developer partners has been well established and can quickly mobilise. The NEMMDR scheme also benefits from the continuation of staff in roles they have undertaken on the aforementioned projects, bringing a significant degree of expertise to the project.

6.4.27. The team includes:

- LCC 'Lead Project Manager' (Adam Lakin);
- Key LCC officers from the Assets & Major Programmes Team;
- Midland Highway Alliance and LCC engineers specialising in highway design, structures, lighting, traffic signals and network management;
- LCC and AECOM environmental specialists covering flood risk, landscape, biodiversity, the historic environment and rights of way;
- The County Council's Term Consultants, providing additional independent specialist advice as required, including business case preparation, traffic modelling, risk analysis and noise and air quality appraisals;
- Developers' consultants providing additional support and advice as required;
- Melton Borough Council officers advising on Local Plan and Development Control issues; and
- LCC's S151 Officer.

6.4.28. These are supported by LCC's internal Project Audit team, with further independent project health checks held at key OGC gateways. This is discussed further under Project Assurance.

6.4.29. The Project Delivery Team follows best practice in terms of structure, governance and the monitoring of programme and delivery, as embodied in LCC's project management procedures founded on PRINCE2 methodologies, accountabilities and audit/ review.

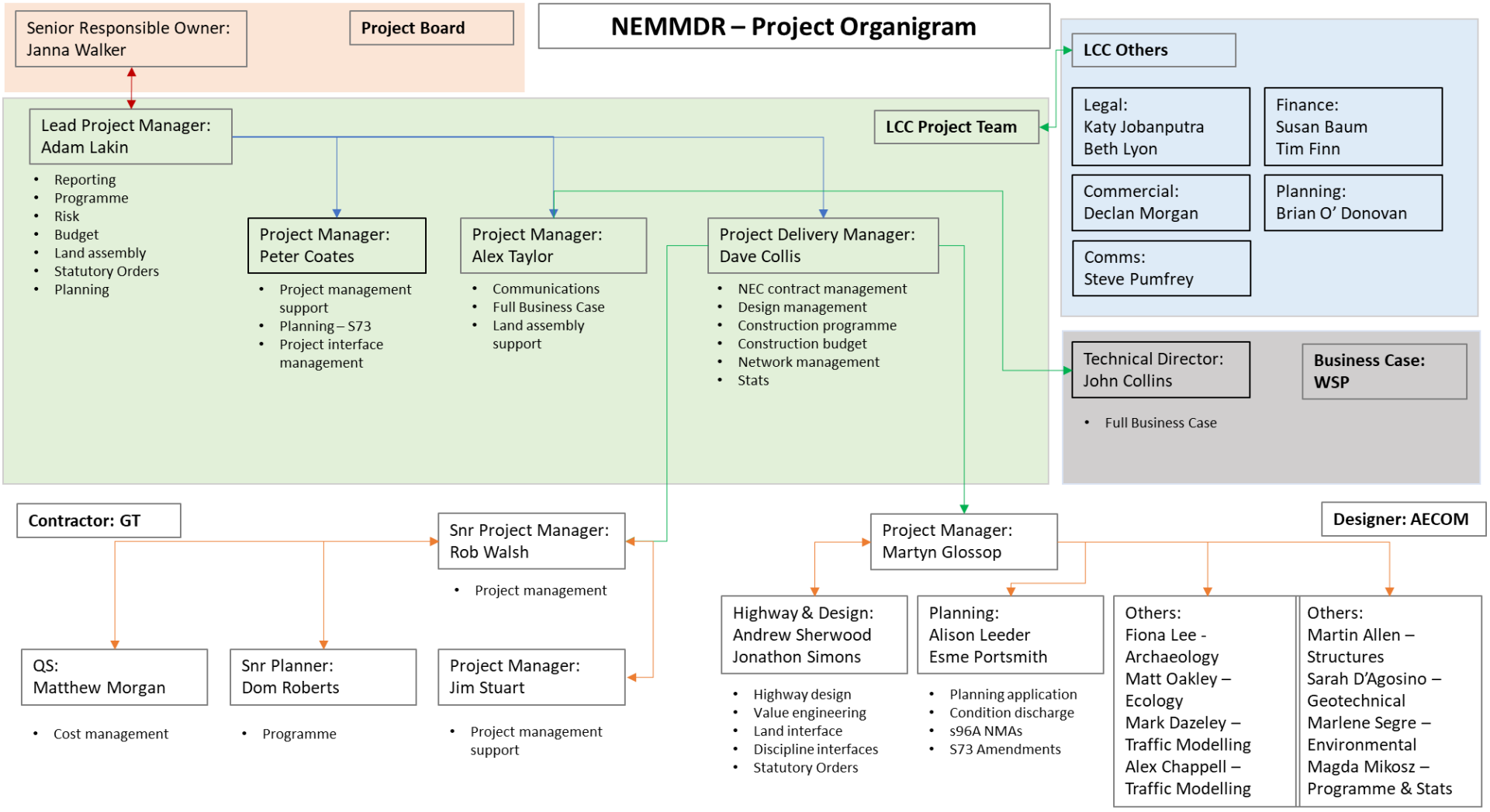
PROJECT REPORTING

6.4.30. There are two key reporting lines (this relates to actual reporting of progress, risks, issues etc. rather than general provision of information to Board members) for this project as follows:

- The **Lead Project Manager (Adam Lakin)** reports to the Project Board formally at each Project Board meeting and on an as and when required basis to the **Senior Responsible Owner, Janna Walker**.
- The Delivery Team leads report to the **Lead Project Manager, Adam Lakin**, on a monthly basis in advance of the Project Board meeting while report exceptions will be made to the Programme Coordinator on an as when required basis. The Project Delivery Team report through Adam Lakin (Lead Project Manager) to the Project Board with decisions made by the Senior Responsible Owner, Janna Walker.

6.4.31. The Delivery Team hold "weekly calls" to discuss cross-discipline issues.

Figure 6-4 - NEMMDR Project Board and Delivery Team



CHANGE MANAGEMENT

6.4.32. Changes to any outputs of the scheme are subject to instruction from the Project Board. The procedures for change are that changes within the scope of the Terms of Reference may be agreed by the SRO/Project Board, and any other major changes will be escalated to the County Council's Cabinet for political approval.

6.4.33. Changes to scope/preliminary design have historically been managed via an Early Warning and Change Authorisation Request system. Moving forwards, changes to detail design and construction are to be managed via the NEC4 contract procedure and there are defined levels of authority for change escalating through the Lead Project Manager and the Project SRO.

AVOIDING CONFLICTS OF INTEREST

6.4.34. LCC have current measures and policies in place for employees to deal with any conflicts of interest including:

- Employees must not misuse their official position or information acquired in the course of their employment for personal gain or to benefit their family or friends;
- All employees must identify and disclose any actual or potential personal, financial, business, or other interest or close personal relationship which might reasonably be perceived as a conflict of interest; and
- Any existing employee who wishes to undertake any other personal interests, which could reasonably be perceived as a conflict of interest, should complete and return a registration form.

6.4.35. For this project, any LCC elected members on decision making bodies have been requested to declare any Conflict of Interest (COI) and recuse themselves from related decisions where necessary.

6.4.36. Where individuals that are not employees of the council are to be members of a tender assessment panel (for example, service users or representatives from partner organisations or consultants) then a CoI and confidentiality undertaking form may be issued for completion ahead of the procurement process. This allows for any potential conflicts of interest to be declared and assessed. It also allows us to establish an undertaking from the panellist that they will treat all tender information and documents as confidential.

6.5 PROJECT PLAN

6.5.1. The detailed programme is under continuous review and is provided in Appendix N.

6.5.2. LCC have commenced some works prior to potential funding award to enable the commencement of construction activity and meet planning approval conditions which included that development had to begin within 3 years from the date of the permission.

6.5.3. Demolition of Sysonby Farm, which is a LCC owned vacant property at site of a future roundabout on the NEMMDR and LCC highways depot, was carried out in April 2022. Further archaeological works will also be undertaken from late July to early September.

6.5.4. The key milestones of the project are listed in Table 6-4.

Table 6-4 – Overview of Key Milestones

Delivery milestones	Estimate
OBC submitted	December 2017
Planning application made	October 2018
Planning permission granted	May 2019
Statutory Orders made	July 2020
Works procurement	August 2020
Public inquiry	September 2021
Confirmation of orders	April 2022
FBC submission	November 2022
Works 'notice to proceed' issued	January 2023
Main works commence	March 2023
Works completed	April 2025
Road opens to traffic	May 2025

6.6 ASSURANCE AND APPROVALS PLAN

Assurance activity is defined in the Public Sector Internal Audit Standards (PSIAS) as: 'An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management and control processes for the organisation. Examples may include financial, performance, compliance, system security and due diligence engagements.'

6.6.1. Internal LCC Project Audit is provided through the LCC Internal audit Charter (November 2016), which was adopted by LCC Internal Audit Service (LCCIAS). It is developed based on the PSIAS. The PSIAS were revised in April 2016 and a Local Government Application Note developed by the Chartered Institute of Public Finance and Accountancy setting out practical guidance on how to apply the PSIAS.

6.6.2. LCCIAS conducts a wide range of engagements (assignments) designed to evaluate the quality of risk management processes, systems of internal control and corporate governance processes, across all aspects of the Council's control environment (including working in partnership with and leading on behalf of others).

6.6.3. LCCIAS provides periodic reviews in relation to the NEMMDR on project management, delivery, programme and overall critical success factors that lie behind successful project delivery, using the above guidance to undertake reviews, and with a particular focus on internal and external risk management. These are cemented by independent reviews conducted by Newton Europe and Faithful & Gould.

6.6.4. LCCIAS also co-ordinates its assurance activity with other internal and external providers of assurance services to ensure sufficient and proper coverage over the control environment and minimise duplication of efforts.

GATEWAY REVIEWS

The Gateway Review process is utilised by LCC for this project, in recognition of this being an independent, and recognised best practice route to deliver the benefits of wider, and fully encompassing project assurance at key project milestones.

6.6.5. Peer reviews, or 'gateway reviews' are commissioned on a confidential basis by the Senior Responsible Owner, Janna Walker.

6.6.6. These Gateway reviews provide assurance and support to Janna Walker as the SRO that:

- Suitable skills and experience are deployed on the project;
- All stakeholders understand the project status and issues;
- There is assurance that the project can progress to the next phase;
- Time and cost targets have a realistic basis;
- Lessons are learned; and
- The project team are gaining input from appropriate stakeholders.

PROGRAMME FOR GATEWAY REVIEWS

6.6.7. To date, the following reviews have been undertaken by LCC and Local Partnerships at the following stages:

- Gateway 0/1 – completed 25th May 2018;
- Gateway 2 – completed 27th November 2019; and
- Gateway 3 – completed 16th September 2022.

6.6.8. The most recent gateway review included a number of findings and recommendations which will be taken into account in the continued development of the scheme. These include:

- The development of a joint strategy and delivery plan with MBC to outline how the benefits of the NEMMDR and southern extension will be realised;
- Ensure strong links in terms of project governance with MBC and other key stakeholders;
- Strengthen internal communications;
- Ensure the project's risk register/s are up-to-date and risk owners are specifically names;
- Ensure the full learning benefits of the project are realised and lessons learnt captured, documented and used in future schemes; and
- Ensure a formal handover arrangement is established to transfer contract management oversight to the LCC delivery team.

6.7 COMMUNICATIONS PLAN

COMMUNICATION AND ENGAGEMENT STRATEGY

6.7.1. LCC have developed various plans and strategies in relation to communication and stakeholders including:

- Relationship Management Plan
- Strategic Communications Plan
- Project Communications Plan

6.7.2. LCC's Communications Strategy which defines and sets out the principles, objectives and approach for the engagement with stakeholders and consultation with interested parties on the proposed NEMMDR. The Communications Strategy sets out to ensure an inclusive approach during the ongoing dialogue throughout the scheme development and construction process.

6.7.3. The Communication Strategy for the scheme has been developed in accordance with the Leicestershire's Equalities obligations under the Equality Act 2010 and the associated Public Sector

Equality Duty (Section 149 of this Act) which places emphasis on maintaining an ongoing dialogue with interested parties using appropriate communications channels to ensure an inclusive approach.

6.7.4. The Council's Equality and Diversity Strategy (2016 -2020) commits LCC to make sure that anyone who accesses services will be treated fairly and without discrimination and ensuring that discrimination on the grounds of any of the protected characteristics is avoided.

6.7.5. In developing communication and engagement strategies for schemes promoted by LCC, the Council considered:

- Identify all key stakeholders; both individuals and groups to enable effective engagement with each stakeholder group through the life of the project;
- Understand and 'map' the interest and influence of each of the stakeholders;
- Identify the different channels of communication that will be used to successfully engage with stakeholder groups to seek their views on the proposed scheme. The strategy will identify how these channels will be used, when they will be used, and what information will be provided and by whom while also underpinning future activities such as planning and communications with landowners.

COMMUNICATION PRINCIPALS

6.7.6. The following principles are taken from the County Council's Corporate Communication Strategy and form the basis for the NEMMDR communication plan.

6.7.7. Communication principles are owned by the SRO, Janna Walker and set at Project Board level. These will be:

- honest, open and accurate;
- available in a range of accessible formats;
- clear, simple and user-friendly;
- consistent and relevant;
- timely and current;
- legitimate, in accordance with relevant legislation, codes of practice and with the Council's own protocols and guidelines;
- high quality;
- monitored and reviewed on a regular basis; and
- cost-effective.

COMMUNICATION OBJECTIVES

6.7.8. The communications objectives are owned by the LCC Lead Project Manager, Adam Lakin, and are split into two categories and outlined below.

Table 6-5 - Communication Objectives

Category	Objectives
Strategic	To be proactive and structured with communication
	To keep all stakeholders informed in an appropriate and timely way about the process and progress of the project, ensuring they are aware of the benefits of the proposed scheme.

	To ensure accurate and timely information is provided to stakeholders and the wider public to ensure they understand the need for change
	To raise awareness of LCC's role and leadership as we take forward this and other projects to encourage inward investment and improve the look and feel of the town centre
	To engage with key partners and stakeholders to ensure their positive support for the project
	To keep a sense of impetus about the project to maintain interest and enthusiasm
Tactical	To ensure that the scheme is promoted as part of wider improvements in Leicestershire
	To be clear about the process for minimising disruption during the construction period
	To publish successes and regularly report on progress against targets
	To effectively manage a two-way dialogue between the project managers and all stakeholders to keep interested parties informed of changes as well as gathering views on proposed changes

COMMUNICATION SCHEDULE

6.7.9. The schedule of communication that LCC has currently prepared is outlined below and can be found in full in Appendix O.

6.7.10. Public exhibitions were previously held between 2nd September and 15th October 2017 at various locations.

6.7.11. The communication schedule post-FBC is provided in Table 6-6 below.

Table 6-6 - Schedule of Communication

Timing	What	Message	Method of Communication
Winter 2022/23	▪ Project Roadshows and general scheme comms	▪ Meet the Contractor event ▪ Opportunity for residents and other interested parties to ask questions of the contractor ▪ Likely to be of particular interest – compound locations, traffic impacts, work hours, environmental impacts and mitigations.	▪ Face to face engagement event – Location/date tbc ▪ LCC web and social media ▪ Various – email; formal press release via LCC Press Officer etc ▪ Update on LCC scheme website ▪ Regular newsletter
December 2022	▪ Funding confirmed (approval of Full Business Case)	▪ Outline nature of project and reason. Funding has been secured for the delivery of the Project. Final hurdle from a funding perspective. ▪ Scheme benefits	▪ Press release ▪ Members Update ▪ Email to LCC project sponsor ▪ Councillors ▪ Web/Twitter

February – March 2023	▪ Mobilisation and Start of Main Works	▪ Benefits of project ▪ Programme of work ▪ Construction traffic ▪ Road closures	▪ LCC web and social media ▪ Various – email; formal press release via LCC Press Officer etc ▪ Update on LCC scheme website
Ongoing from March 2023 – April 2025	▪ Progress updates during construction	▪ To update people of progress and provide information on any changes to the programme.	▪ Press release ▪ Website – dedicated webpage for scheme updates during construction. ▪ Twitter ▪ CSC Briefing Note
As and when required	▪ Closures and/or night-time working	▪ Inform public of road closures so that they can make alternative arrangements.	▪ Press release ▪ Web ▪ Social media ▪ Stakeholder monthly update to include forecast
December 2023 and 2024	▪ Possible Christmas Moratorium	▪ To keep traffic flowing over the Christmas period work has been reduced and any work carried out will not be on the highway.	▪ Press release ▪ Web ▪ Social media ▪ Customer Service Bulletins ▪ Members Briefing ▪ Staff
April 2025	▪ Completion of main Works	▪ Completion of the project and details of an opening event if appropriate. ▪ Scheme successes – traffic well managed, scheme completed on time etc.	▪ Press release ▪ Web ▪ Social media ▪ Customer Service Bulletins ▪ Members Briefing ▪ Staff Intranet
May 2025	▪ Road Opens	▪ Road opens ▪ Successful delivery ▪ Scheme benefits	▪ LCC web and social media ▪ Various – email; formal press release via LCC Press Officer etc. ▪ Opening ceremony
Post May 2025	▪ Delivering benefits	▪ Delivering benefits retrospective on the early benefits accruing from the scheme. ▪ Chance to remind of the long-term benefits ▪ Including environmental considerations – River Eye, Biodiversity Net gain across the scheme ▪ 10km of new PRoW	▪ LCC web and social media ▪ Various – email; formal press release via LCC Press Officer etc.

ENGAGEMENT CHANNELS

6.7.12. The communication strategy for this scheme has and will encourage an open and honest approach to engender trust in LCC from the local residents and business community as well as key statutory and non-statutory stakeholders.

6.7.13. A wide variety of channels for communication have and will be employed to ensure equality of opportunity to make views known and to afford the appropriate weight to the consideration of the views from all individuals and groups. These channels include:

- Public exhibition;
- Web-based opportunities to engage;
- Email and social media channels;
- Paper and online questionnaire surveys;
- Opportunities for 'free-style' written responses; and
- Individual face to face meetings for those directly affected by the proposed scheme.

6.7.14. The engagement channels ensure that:

- All stakeholders are informed of the project objectives, current progress and key issues;
- Communications are reviewed to ensure the right messages are communicated through the correct channels in a timely way;
- Feedback is captured, recorded and appropriate responses given in a timely manner; and
- Any design changes made in response to comments are captured i.e. "you said, we did" manner to demonstrate how consultation feedback has influenced modifications to the scheme.

KEY MESSAGES ABOUT THE SCHEME

6.7.15. The transport benefits of the NEMMDR are to reduce congestion, remove through-traffic and rat-running through the town, significantly reduce HGV movements in the town centre, and improve air quality, noise, road safety and provide a more pleasant town centre environment.

6.7.16. Through delivering these transport objectives it will enable, accelerate and sustain housing delivery in Melton Mowbray to deliver the Local Plan, as well as enhance accessibility to/from the town for existing residents, businesses and visitors to promote economic growth. The opportunities afforded to the town centre by the scheme are also vital to enable enhanced walking and cycling, public transport and town centre regeneration opportunities having removed significant through traffic.

6.7.17. The key messages for the communication strategy follow these benefits, and are:

- **The NEMMDR will reduce traffic congestion through Melton Mowbray**
  - The NEMMDR will reduce congestion and improve local noise and air quality impacts to residents by removing through traffic from the town for both car and LGV/ HGV traffic.
  - The reduced traffic through the centre of Melton Mowbray will provide future opportunities for public realm improvements in the town centre to support local businesses and complementary improvements for public transport, pedestrians and cyclists.
- **Support the delivery and acceleration of housing and employment to the north and south of Melton Mowbray town centre**
  - The NEMMDR scheme is designed to support the delivery of up to 6,000 homes and over 31 hectares of employment land.
  - The NEMMDR will reduce traffic in the town centre and offer an opportunity to improve the general environment for pedestrians and cyclists.

KEY STAKEHOLDERS

6.7.18. Stakeholder analysis has been undertaken by LCC and owned by the LCC Lead Project Manager, Adam Lakin. This has been undertaken to:

- Identify and map stakeholders, both individuals and groups to understand their interests and influence in the scheme to inform the communications approach;
- Enable the project team to plan on-going stakeholder engagement through the development of the NEMMDR scheme; and,
- Enable effective management of relationships and ensure comments and views received are properly captured, recorded, and used appropriately to inform the refinement of the scheme.

6.7.19. The stakeholders, their interest and influence can be categorised into four tiers:

1. Strong buy-in (high interest/high influence)
2. Need to consult (high interest/low influence)
3. Maintain interest (low interest/low influence)
4. Keep informed (low interest/low influence)

6.7.20. Table 6-7 lists the key external stakeholders by tier and demonstrates how and when LCC will communicate with them and the information they require .

Table 6-7 - Stakeholder Categories, requirements and channels of communication

Group	Organisations	Key Requirements	Communication and engagement channels	Frequency/Times
Tier 1 Strong buy-in	▪ Political – Ward and parish councils affected by recommended route ▪ Leicestershire CC and MBC- Members and respective Executives ▪ Statutory consultees – directly influenced, Environment Agency, Natural England, Canal and River Trust, National Highways, Historic England ▪ Emergency Services	▪ Need to understand the scheme, key stage dates during design and construction, so that a response can be given to enquiries e.g. members of the public/ constituents/ senior leadership team	▪ Written communication ▪ Individual meetings ▪ Invitations to public consultation ▪	▪ Initial meeting, regular monthly written updates
Tier 2 Need to consult	▪ Political – Ward and parish councils not directly affected by the recommended	▪ To be knowledgeable at key stages of the scheme development and able to provide timely and relevant	▪ Written communication ▪ Requested to complete questionnaire	▪ Ad-hoc as and when required to meet overall scheme timeline and objectives

	route, neighbourhood development team ▪ Community – schools, charities, societies, associations and voluntary groups ▪ Transport - buses ▪ Statutory Bodies – Network Rail, DVSA ▪ Specialist including woodland trust, forestry commissions, ramblers association, cycling UK. ▪ Businesses directly affected	information to the project as necessary.		
Tier 3 Maintain interest	▪ Adjacent Local Authorities not directly involved ▪ Influencers – Transport (national), Chambers of Commerce, ▪ Voluntary groups, sports societies ▪ Specialist including Sport England, Federations of businesses etc.	▪ To be informed about the scheme at key stages of design and construction	▪ Written communication ▪	▪ Ad hoc - as and when required to meet overall scheme timeline and objectives
Tier 4 Keep informed	▪ Media	▪ To be informed about the scheme at key stages	▪ Press notices ▪ Social media	▪ At key stages (e.g. start of consultations, start of works, opening to traffic)

6.8 RISK MANAGEMENT STRATEGY

RISK MANAGEMENT PROCESS

6.8.1. The HM Treasury Green Book 2022 states that “effective risk management helps the achievement of wider aims, such as change management, the efficient use of resources, better project management, minimising waste and fraud and supporting innovation”.

6.8.2. LCC recognises that in order to successfully achieve its own fundamental transformation, effective risk management is vital. The Council has a dedicated Risk Management Policy where managers are encouraged and supported to be innovative whilst understanding the risk and implications so they might make informed decisions in order to achieve objectives and deliver results. By being risk aware,

reviewing its risk appetite and tolerance, the Council will be better placed to both take advantage of opportunities and manage threats.

6.8.3. LCC's risk management is based on the Association of Local Authority Risk Managers (ALARM) developed and published a National Performance Model for Risk Management in Public Services to illustrate what good risk management looks like in a public service organisation. There are five levels which are summarised in Figure 6-5.

Figure 6-5 - Project Risk Management Process

6.8.4. Risk management is a continual process involving the identification and assessment of risks, prioritisation of them and the implementation of actions to mitigate the likelihood of them occurring and impact if they did.

6.8.5. The NEMMDR Project Board's approach to risk management is proportionate to the decision being made or the impact of the risk, to enable LCC to manage risks in a consistent manner, at all levels.

RISK IDENTIFICATION

6.8.6. A Risk and Opportunity register was initially developed May 2017 and has been continually updated on a monthly basis to reflect change as the scheme progressed.

6.8.7. As the projected has progressed it was considered more efficient to split the risk registers up, and there are currently three risk registers (project risk, design risk and construction risk) all of which can be found in Appendix K.

6.8.8. Risks are included as a specific item on the monthly Project Board agenda, with further and dedicated risk management workshops held between these.

6.8.9. Risks have been identified by specialists in all relevant disciplines and entered into the risk registers. These include individuals with detailed understanding of requirements for planning, Environmental

Impact Assessment, consents and orders, to effectively identify risk upfront as well as to identify early requirements to mitigate and/or manage the supporting activities required.

6.8.10. The main risks as identified in the risk registers are summarised in Table 6-8.

6.8.11. These also highlight the mitigation practices and actions currently being deployed by LCC to eliminate, mitigate or significantly reduce the probability or impact of the risk occurring, with particular attention paid within these actions to the most important risks; whether from a timescale or cost perspective (or both).

Table 6-8 - Summarised Risks

ID	Sub-category	Risk	Impact	Mitigation
Project				
5	**Funding**	Funding may be delayed	Programme delay / inflation. Delay increases costs and abortive work. If funding is cancelled, significant proportion would not be able to be constructed resulting in abortive cost	Regular contact with scheme stakeholders.
7	**Land**	Additional Land negotiation costs	Increase in project cost	
Construction				
1	**Statutory Undertakers**	Discovery of uncharted statutory undertakers plant	Significant delays to planned completion and disruption to works activities	Close liaison with Stats bodies. Trial holes to be undertaken in advance of works, where new carriageway crosses existing highway network and undertake ground radar survey. Aecom provide composite drawing of stats and review with contractor to identify areas of highest risk for further investigation.
2	**Statutory Undertakers**	Statutory Undertakers diversions not commenced/completed as programmed	Delay to the programme	Regular progress meetings with the statutory parties to mitigate any delays on the programme. Hold readiness reviews with SU's. Ensure C4 estimates and timescales are in programme once

				challenged. Engage utilities specialist
10	**Archaeology**	Unplanned/additional archaeological investigation works	Significant delays to planned completion.	Undertake desk top study to identify ground radar survey areas. Pre-start investigations through topsoil strip any areas of identified potential archaeological presence under Watching Brief. Undertake advanced archaeological investigations.
17	**Weather**	Above 1 in 10 weather events disrupts earthworks or other site operations	Delay to the programme. Affects weather susceptible activities particularly earthworks	Well maintained/constructed haul routes. Proactive monitoring of weather reports. Short stand-down periods where required. Prepare water/pollution strategy. Undertake pre-earthworks drainage.
71	**Economy**	Inflation - General Civils	Extra over inflation of staff / material cost (hyper-inflation) E>O against X1	-
78	**Statutory Undertakers**	IP gas main protection Rbt 3 - requirement for piled protection slab.	Additional cost for design, assessment and construction of temporary protection slab	Produce design for protection slab and submit for approval from Cadent. Confirm protection is adequate and diversion not required.
83	**Third Parties**	Difficulty of managing crossing frequency of 'The Hawleys' Livestock impacting works and/or PRoW.	Works management - cost & programme	Issues to be resolved during S73 application. Consultation with PRoW and Landowner.

11(b)	**Archaeology**	Additional works needed for compound/soil storage areas	Strip map and record required for areas of site compound/soil storage or relocation	Relocate compound & soil storage area where archaeology is zero / low. Work with county archaeologist to provide protection measures rather than relocate, conduct trial pits to examine area for archaeology.

QUANTIFIED RISK

6.8.12. The risk value has been quantified using a Quantified Risk Assessment (QRA) which is then used to produce a risk-adjusted cost estimate, following TAG Unit A1.2 guidance.

6.8.13. For each risk, the minimum and maximum likely impacts have been monetised, using empirical evidence, previous experience on similar projects, or common-sense approximations as appropriate. For construction and project risks, these have been derived pre- and post-risk mitigation; the post-mitigation impacts have been used for the QRA assessment, which are the residual risks following mitigation spending, which has been treated as a fixed cost within the QRA.

6.8.14. Galliford Try has an established ECI and construction phase risk management process that was used to develop the project risk registers. The project team identified the risks and impacts, with potential costs, associated with the project. These were further evaluated for the likelihood of occurrence resulting in a risk rating measure between ‘high’ and ‘low’. Mitigation measures identified were reviewed by the project team to give a revised risk rating with a residual cost impact on the project.

6.8.15. The use of this process allowed LCC to identify areas of more significant risk and their associated mitigation opportunities, enabling an informed decision to be made on the value of allocating upfront funds to provide options for alternative design or construction solutions. The overall benefit of this ECI risk management process is the lowering the potential outturn cost and / or budget uncertainty.

6.8.16. The established process used by the project team, working in collaboration, provides a realistic assessment of risks at this stage in the scheme’s development. The risk profile naturally alters as project scope, design details, and constraints change over time. The risk registers have required periodic review and updating as the scheme develops to incorporate any new, mitigated, or revised risks.

6.8.17. The likelihood of each outcome occurring has been based on past experience on similar schemes. As recognised in TAG Unit A1.2, defining the likelihood of each outcome occurring is not an exact science. The assumptions made can be found within the Economic Assessment Report (found in Appendix D).

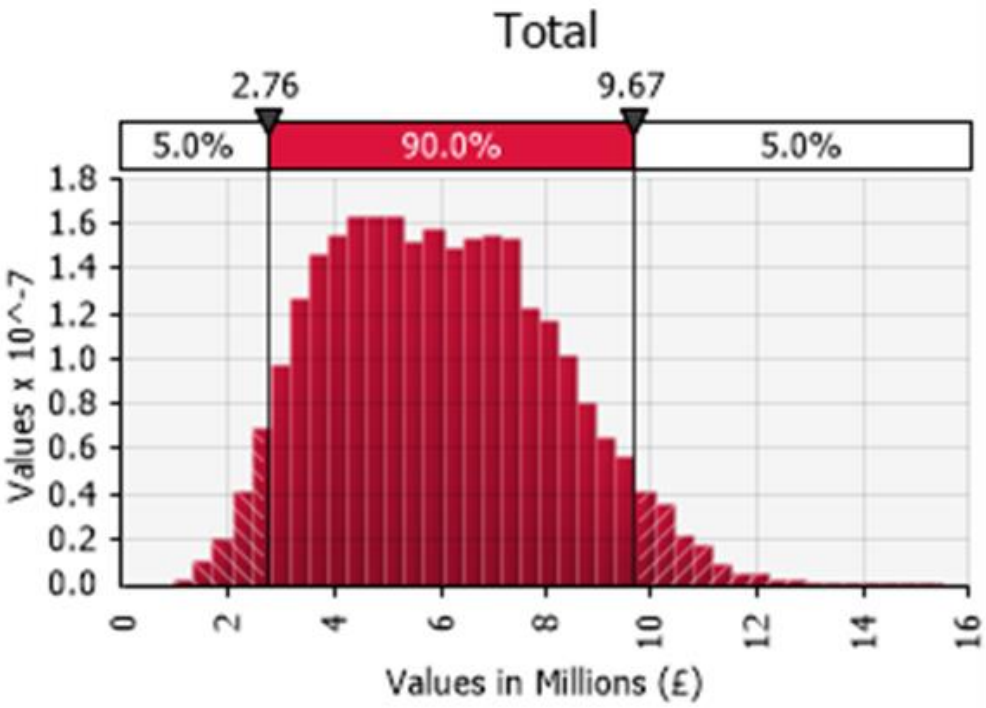
6.8.18. A QRA allows a probability distribution around the costs of the scheme to be derived and enables the expected risk-adjusted cost estimate to be obtained. This expected outcome, also known as the 'mean' or 'unbiased' outcome is the weighted average of all potential outcomes and associated probabilities. This is the (risk-adjusted) mean estimate of the cost of the scheme, and it is to this that optimism bias will be applied.

6.8.19. A Monte Carlo risk model has been developed using MS Excel and @RISK software. Potential correlations between the individual risks have been considered, with no materially dependent

variables identified. Sensitivity tests have been undertaken to assess the impact of unknown correlations being present; the impact on the output probability distribution is relatively small.

6.8.20. The Monte Carlo risk model has been run with 10,000 iterations, with the output probability distribution for the QRA shown in Figure 6-6.

Figure 6-6 - Probability Distribution for the Scheme Cost QRA



6.8.21. The resulting mean, P50 and P80 values from the output probability distributions are given in Table 6-9. The P50 value is used in the Financial Case.

Table 6-9 - Mean, P50 and P80 Values from the QRA

	Mean	P50	P80
QRA Assessment	£5,973,351	£5,856,401	£7,884,833

MANAGEMENT OF RISK

6.8.22. At a project level, risks are managed by the Project Board however the Commercial Case describes how risk will be shared between public and private parties should they occur.

PROJECT TOLERANCES

6.8.23. The tolerance thresholds for the NEMMDR scheme are set out in Table 6-10 below,

6.8.24. The latest approved version of the overall project programme will form the baseline against which the tolerances set out below will be assessed, until such time as an updated or replacement programme is approved via exception reporting procedures.

Table 6-10 - Project Risk Tolerances

Variation Type	Tolerance
Budget	▪ Deviations of more than 10% from Project Budgets (on a task basis) will be raised immediately with the Project Board except the main Target Cost contract where additionally deviations of more than 5% will be immediately reported to the Project Manager.
Timescale	▪ Slippage of 1 week with respect to the key milestones will be reported to the Project Manger to consider action ▪ Slippage of 2 weeks or more will be reported to the SRO via the Project Manager.
Resource demand	▪ If the requirement for additional staff resources cannot be negotiated and resolved by the Project Manager and the individual/team manager involved, the issues will be escalated to the Project Board.
Scope	▪ All variations in project scope will be reported to the Project Board.
Benefits	▪ All variation in estimated benefits will be reported to the Project Board.

IMPLEMENTATION AND REVIEW

6.8.25. Effectiveness of the response plan is dependent on the implementation and review of the residual risk (including any secondary risk associated with implementation).

6.8.26. Reviews of the status of scheme risk assessments and their related response plans (as part of project reporting) are an integral part of progress meetings (and at the Project Board) during the construction period. All key risks are formally reviewed at key decision points in the scheme lifecycle.

6.9 CARBON MANAGEMENT PLAN

6.9.1. A Carbon Management Plan (CMP) has been developed for the NEMMDR, with an aim to effectively manage carbon throughout the project lifecycle by encouraging early consideration of associated carbon emissions and creating associated governance structures and processes.

6.9.2. The CMP outlines how carbon emissions associated with the scheme will be minimised, in line with LCC's commitment for the county to be net zero carbon by 2045. The plan describes how carbon reduction opportunities will be considered during each stage of infrastructure delivery. The objectives of the CMP are to:

- Outline and describe carbon management governance, roles and responsibilities;
- Provide a baseline assessment of the NEMMDR carbon emissions;
- Facilitate early identification of carbon opportunities;
- Present carbon reduction target(s); and
- Describe the process for ongoing carbon management, monitoring, reporting and review.

6.9.3. The full CMP can be found in Appendix B.

6.10 BENEFITS REALISATION PLAN

OVERVIEW

6.10.1. Following successful delivery of the project, it will be important to understand whether the forecast impacts of the scheme and anticipated benefits have materialised. The most important element of a successful project is that it delivers its intended outcomes. An outcome is a result of change which affects real world behaviour or circumstances and may lead to one or more benefits. A benefit is a measurable improvement resulting from the changes and outcomes introduced by the project.

6.10.2. A Benefits Realisation Plan has been prepared for the NEMMDR scheme. The plan is designed to enable benefits, and disbenefits, that are expected to be derived from the project, to be planned for, managed, tracked and realised. The plan will help demonstrate whether the scheme objectives identified in are able to generate the desired 'measures for success'. This can be assessed by tracking and realising the desired outputs and outcomes of the project.

6.10.3. Desired outputs are those tangible effects that are funded and produced directly as a result of the scheme. Desired outcomes are the final impacts brought about by the scheme in the short, medium and long-term. As part of this plan, a programme of monitoring will be established from pre-construction through scheme construction, and for a period of up to 5 years post-scheme opening. The scheme objectives, together with the desired outputs and outcomes, are summarised in Table 6-11.

6.10.4. The benefits have been classified as quantitative (Qn) or qualitative (Qi). Quantitative benefits are those which can be measured in terms of specific numeric values on a continuous scale, whether in absolute or percentage terms, whereas qualitative benefits are measured in category-based or descriptive terms.

Table 6-11 - Scheme objectives, outputs and outcomes

Strategic Scheme Objectives	Desired Outputs	Desired Outcomes	Timing of Review	Targets
Reduce congestion and remove through traffic	A new road that reduces congestion on the local network, in particular key pinch points in and around Melton Mowbray town centre. Ensure a focus on HGV traffic and local rat-run routes, as well as on through traffic.	Reduced congestion and improved safety on the local town road network. Improved operation of key junctions and routes within Melton. A more integrated town and community. Improved vitality and viability of the town centre.	1-year post-scheme opening. 5-years post-scheme opening.	Qn ▪ Average daily traffic by peak/non-peak periods. ▪ Average AM and PM peak journey times on key routes. ▪ Day to day travel time variability.
Support and accelerate economic and housing growth in key development areas	A scheme which helps to enable, accelerate and sustain housing growth in Melton and the wider Borough, and provide access to important development sites which would bring more opportunities for affordable housing for local residents and help to attract new businesses to the area through enhanced	Identified new housing development (including new affordable housing) coming forward. Identified new employment development in Melton coming forward. Improved access to existing and new development areas.	1-year post-scheme opening. 5-years post-scheme opening.	Qn ▪ Housing unit starts. ▪ Housing units completed ▪ Jobs connected to the intervention. ▪ Commercial/employment floor space constructed

	accessibility to and from Melton	Improved employment opportunities and wider labour market catchment		
Improve the vitality of the town centre to achieve its full potential- for all users, residents, businesses and visitors	A scheme that helps to improve the overall air quality and reduce noise impacts of traffic in the town centre as well as the existing roads; by diverting the strategic through traffic to the new route thereby reducing congestion and emissions caused by traffic in the town.	Improved health and well-being. Increases in walking/cycling and public transport usage Improved local air quality and noise levels on existing routes in the town centre.	1-year post-scheme opening. 5-years post-scheme opening.	Qn ▪ Accident and casualty rates ▪ Annual average daily and peak hour public transport passenger data. ▪ Cycle / pedestrian counts on new / existing routes.

OWNERSHIP OF THE BENEFITS REALISATION PLAN

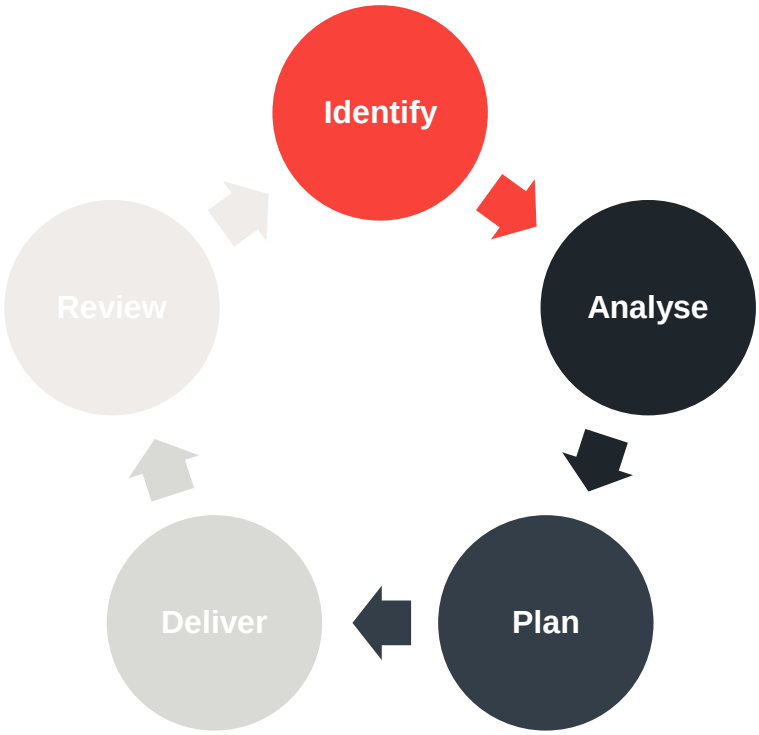
6.10.5. The Benefits Realisation Plan is linked to the Monitoring and Evaluation Plan described below in Section 6.11 and owned by the Senior Responsible Owner, Janna Walker, who will use it to guide decision making about the scheme and to demonstrate completed delivery.

6.10.6. The objectives and desired outcomes of the scheme are the starting point for the Benefits Realisation Plan. As the scheme is developed the mechanism for delivering these will be designed in and reviewed by the Lead Project Manager and the Project Board on a number of occasions to ensure it still fits with the objectives.

APPROACH AND STAGES OF THE BENEFITS MANAGEMENT CYCLE

6.10.7. The DfT guidance sets out a five-stage cycle for the evolution of benefits, their maintenance and monitoring during the lifecycle of a programme, highlighted in Figure 6-7**.**

Figure 6-7 - The Benefits Management Cycle (Source: DfT Programme and Project Management Portal)



6.10.8. The owner and associated partners will undertake a full assessment of potential benefits, in accordance with the DfT guidance set out above. Therefore, the process will be based on the following:

- **Identify** – the stakeholders impacted by the NEMMDR, and the beneficiaries of each benefit; any additional enablers required over-and-above the proposed scheme; the body or individual responsible for delivering the benefits; target dates for the achievement of the anticipated benefits.
- **Analyse** – once the potential benefits have been identified, they need to be systematically analysed to calculate their financial value and the level of risk associated with the calculations.

- **Plan** – implement a clear timetable for delivering the scheme. The timetable will be a live document throughout the delivery process and will be informed of any necessary steps that are planned to maximise the benefits.
- **Deliver** – the programme will ensure that the identified benefits are delivered by working closely with stakeholders and delivery partners.
- **Review** – the benefits will be reviewed at pre-determined stages that fit into the wider programme delivery. This part of the process is where the monitoring and evaluation most clearly overlaps with the benefits realisation.

6.10.9. Benefits management will evolve as the project progresses and is one of the few elements of project delivery which spans the whole lifecycle of the project, from conception to evaluation post-delivery. The anticipated benefits of the scheme will be reviewed at each stage of delivery in order to confirm that the scheme still offers Value for Money.

6.10.10. The owners are responsible for tracking the identified benefits and for reporting any exceptions to the Lead Project Manager. This allows for early identification of any expected benefits that may become unrealised to be remedied.

REVIEWING THE BENEFITS REALISATION PLAN

6.10.11. The method for determining the success of the NEMMDR scheme will be through monitoring the delivery of the outputs to ensure they are delivered in such a way that meets the objectives and by finding a suitable measure for the direct and in-direct outcomes.

6.10.12. In a number of instances, the measurement of benefits is time critical, particularly as the scheme supports housing development economic development. In relation to the NEMMDR this is a significant element of the scheme's objectives and justification, as such these desired benefits will be realised over a significant period of time after project completion.

6.10.13. This in turn helps drive the projects monitoring and evaluation strategy, and how often data needs to be collected (with much of the economic data proposed to be collected on an annual basis, in addition to typical transport monitoring before, 1 year after and 5 years after scheme opening).

6.10.14. It is also fundamental to scheme delivery that the risks around achieving the objectives are understood and mitigated where possible.

6.11 MONITORING AND EVALUATION PLAN

OVERVIEW

6.11.1. The Monitoring and Evaluation Plan for the NEMMDR has been developed in line with the DfT guidelines set out in the Monitoring and Evaluation Framework for Local Authority Major Schemes (September 2012). This section outlines the approach that has been taken in developing the Monitoring and Evaluation Plan. The final plan, which has been approved by DfT, can be found in Appendix P.

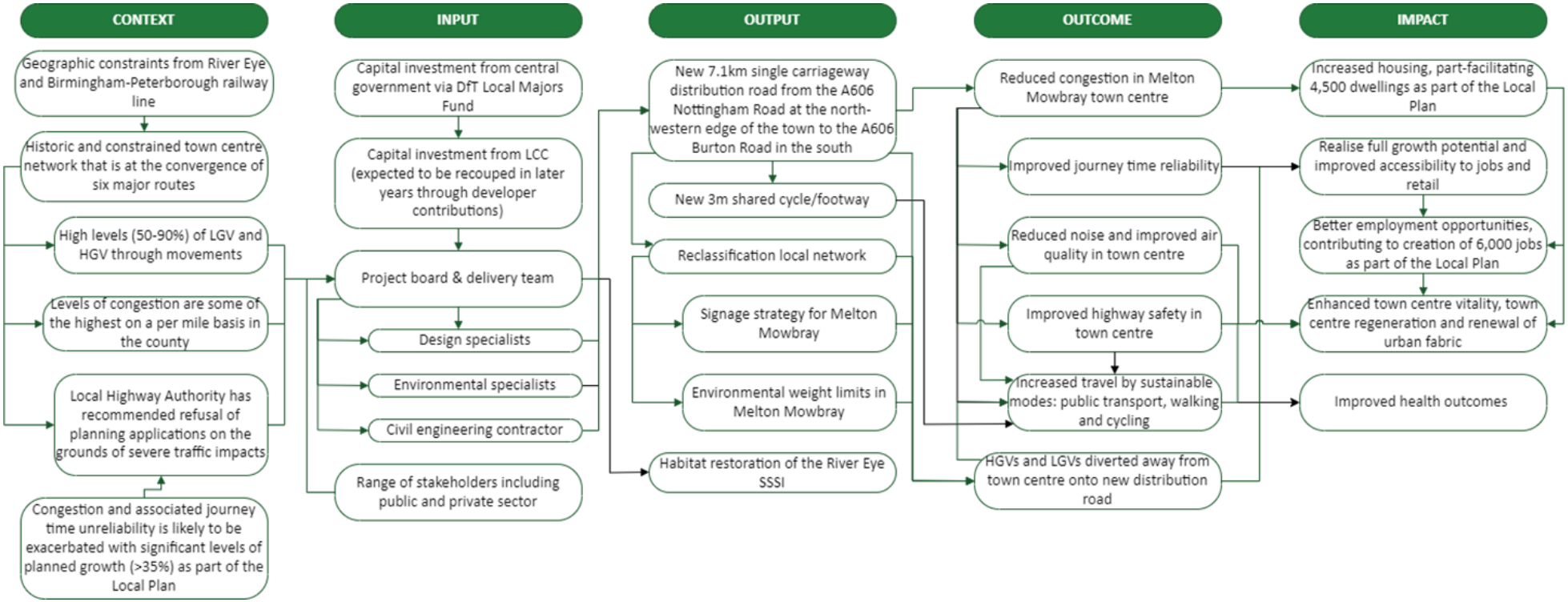
LOGIC MODEL

6.11.2. Logic mapping is a systematic and visual way of presenting the key steps required to turn a set of resources or inputs into activities and outputs that are designed to lead to a specific set of changes or outcomes / impacts. The logic map is used to articulate the underlying causal theory based on the assumptions and evidence underpinning the rationale for the scheme. Its components are defined as:

- **Input** – what is invested in terms of money, skills, people, activities;
- **Output** – what has been produced, e.g. roads built;
- **Outcome** – short- and medium-term results e.g. altered traffic flows; and
- **Impact** – long term outcomes e.g. socioeconomic effects, such as economic growth.

6.11.3. A logic map for the scheme is presented in Figure 6-8 and has been used to aid the development of this Monitoring and Evaluation Plan.

Figure 6-8 - NEMMDR Logic Map



TYPE OF EVALUATION

6.11.4. Department for Transport guidance sets out three levels of monitoring and evaluation:

- Standard monitoring
- Enhanced monitoring
- Fuller evaluation

6.11.5. In July 2020, DfT confirmed that a fuller evaluation should be completed for the NEMMDR scheme, due to the overall cost, the DfT contribution, and the short and long term economic and development objectives of the scheme (specifically, supporting the delivery of increased employment and the delivery of new homes in the area).

6.11.6. Fuller Evaluation builds on the evidence generated through standard and enhanced monitoring. It will triangulate this data with bespoke evaluation data collected to demonstrate the casual pathway between the scheme and observed outcomes and impacts, in a proportional and cost-effective manner.

MONITORING AND EVALUATION OBJECTIVES

6.11.7. Setting the evaluation objectives informs the development of the research questions that will be considered in the evaluation process. The scheme's objectives have been considered in the development of the evaluation objectives which also build on the aims set out in the DfT's guidance, specifically:

- Whether the scheme was delivered effectively and efficiently;
- The casual effect of the scheme on the anticipated outcomes and whether these have contributed to the intended impacts; and
- Whether the scheme had any unintended adverse or positive effects.

6.11.8. The objectives of the evaluation are:

- To provide accountability for how the scheme has been delivered;
- To assess whether the scheme's intended outcomes have been realised and, where possible, to establish to what extent the scheme contributed to those outcomes;
- To assess whether the scheme's intended economic/welfare impacts are being realised and, where possible, to establish to what extent the scheme contributed to those impacts; and
- To establish if the scheme gave rise to any unintended outcomes or impacts.

6.11.9. Further detail on the list of research questions that have been developed in line with these objectives can be found in the subsequent section.

MONITORING AND EVALUATION TIMELINE AND DELIVERY APPROACH

6.11.10. The Monitoring and Evaluation Plan is owned by LCC, specifically the SRO, Janna Walker. The owners for each monitoring task will be defined following approval of the FBC and will report to the NEMMDR Project Board. The costs of monitoring and evaluation will be funded by LCC.

6.11.11. The monitoring process will be split into three stages:

- **Pre-construction and during construction**
  - Baseline data will be collected before scheme construction starts (Spring 2023).
  - Data to monitor scheme delivery will be collected during construction.

- **One year after report**
  - Data to monitor scheme performance will be collected at least one year after scheme opening.
  - An initial "One Year After"' report will be published within two years of scheme opening, focusing on the Scheme's outcomes.
- **Final report (5 years after)**
  - Further data will be collected up to approximately five years after scheme opening
  - A final report will be published within six years of scheme opening based on all data sets, including an assessment of the wider impacts of the scheme.

MONITORING AND EVALUATION APPROACH

6.11.12. The monitoring and evaluation will be used to answer the research questions outlined in Table 6-12.

Table 6-12 – Research Questions

Evaluation Objective	Research questions
To provide accountability for how the Scheme has been delivered	▪ Was the Scheme delivered in line with the programme submitted at FBC and how well was the programme managed? If the programme was not met, what caused the delay and why? ▪ How did the Scheme outturn cost differ from the budget submitted at FBC and how well was the budget managed? If the costs diverged from the budget, what caused the cost changes and why? ▪ Did external factors impact implementation of the Scheme? ▪ What worked well and what are the key lessons learnt from the delivery of the Scheme?
To assess whether the Scheme's intended outcomes have been realised, and, where possible, to establish to what extent the Scheme contributed to those outcomes	▪ Has traffic congestion reduced in Melton Mowbray town centre and by how much? ▪ Has journey time reliability improved through Melton Mowbray and by how much? ▪ Have HGVs and LGVs diverted away from the town centre on to the NENEMMDR and what is the size of this change? ▪ Has air quality improved and noise levels reduced in Melton Mowbray town centre? ▪ Has highway safety improved in Melton Mowbray town centre? ▪ Have levels of cycling and walking activity and public transport patronage increased, and by how much? ▪ Did external factors impact the outcomes of the Scheme and if so, what contribution did the Scheme have on the outcomes?
To assess whether the Scheme's intended impacts are being realised, and, where possible, to establish to what extent the Scheme contributed to those impacts	▪ Has house building increased and in particular have those areas identified in the Local Plan come forward for development? If so, how many houses have been built? ▪ Has access to jobs and retail improved?

	▪ Have the number of new jobs created in Melton Mowbray increased and has the employment level increased? If so, how many jobs have been created and what is the percentage change to the employment level? ▪ Has there been a change in the urban fabric of Melton Mowbray and has town centre footfall changed, and if so by how much? ▪ Did external factors affect the impacts of the Scheme and if so, what contribution did the Scheme have on the outcomes?
To establish if the Scheme gave rise to any unintended outcomes or impacts	▪ Did the construction phase cause any temporary positive or negative effects and if so, what were these? ▪ Has traffic routing changed as expected and if not, where is it different and what impact has that had? ▪ Has the boost to economic performance held back other areas? ▪ Have residents, businesses, or the public commented or complained about the impacts of the Scheme? What impacts do those complaints relate to, and were they anticipated?

6.11.13. Monitoring of the scheme will measure:

- **Travel demand (highway traffic)** – this relates to research questions regarding traffic congestion in Melton Mowbray town centre and the diversion of LGVs and HGVs away from the town centre onto the NEMMDR;
- **Travel times and reliability** – this relates to research questions regarding journey time reliability through Melton Mowbray town centre and access to jobs and retail opportunities.
- **Public transport and active mode demand** – this relates to research questions regarding levels of cycling and walking activity and public transport patronage;
- **Carbon** – this relates to research questions regarding carbon emissions related to transport in the Melton Mowbray area;
- **Noise** – this relates to research questions regarding the noise in Melton Mowbray;
- **Air quality** – this relates to research questions regarding the air quality in Melton Mowbray town centre;
- **Accidents** – this relates to research questions regarding highway safety in Melton Mowbray town centre; and
- **Scheme objectives** – this seeks to answer whether the wider scheme objectives have been met and will include utilisation of data and analysis to measure economic impacts.

MONITORING AND EVALUATION APPROACH DISSEMINATION

6.11.14. The Monitoring and Evaluation Plan will be published on LCC's website for the purposes of local accountability and transparency.

6.11.15. A "One Year After"' evaluation report will be produced within two years of the scheme opening, followed by a "Five Years After" report within six years of the scheme opening.

6.11.16. The aim of the reports will be to demonstrate that value for money has been achieved in implementing the scheme, demonstrate the impacts the scheme has given rise to, including meeting the scheme's objectives, and ensure that lessons learned are applied to future projects.

6.11.17. The reports will be presented to the NEMMDR Project Board to ensure the aims of the evaluation are met and the research questions identified are answered as fully as possible. Following approval, the evaluation reports will be published on LCC's website, and disseminated through other channels (as identified through the stakeholder engagement strategy for the scheme).

6.12 SUMMARY OF THE MANAGEMENT CASE

6.12.1. An appropriate governance structure is essential to the delivery the scheme. LCC has therefore established a Project Board aligned with best practice guidance on project management. The Project Board's primary function is decision-making and review. A Project Delivery Team, including all key stakeholders, has also been established to deal with day-to-day planning and delivery of the project.

6.12.2. A project programme has been developed for this Business Case setting out all the key project tasks and their duration and interdependencies, key milestones and gateways. It will act as a live document, with progress being monitored on a weekly basis by the Lead Project Manager.

6.12.3. The process for identifying and managing risks has been clearly articulated and will continue through the project life-cycle.

6.12.4. Key stakeholders have been identified and a communication and engagement plan, including a stakeholder management plan has been adopted, following the practice used in previous projects. Details of recent experience with the delivery of similar projects are set out.

6.12.5. Plans have been put in place to ensure benefits realisation and monitoring and evaluation of the scheme.

Appendix A

2017 OPTIONS ASSESSMENT REPORT

Appendix B

CARBON MANAGEMENT PLAN

Appendix C

LETTERS OF SUPPORT FOR THE SCHEME

APPENDIX C: LETTERS OF SUPPORT FOR THE SCHEME

i. Alicia Kearns MP: Member of Parliament for Rutland and Melton
ii. Andy Reed: Chair of LLEP
iii. Councillor Bryan Lovegrove: Leicestershire County Councillor, Belvoir Division
iv. Councillor Joe Orson: Leader of Melton Borough Council
v. Councillor Ozzy O'Shea: LCC cabinet member for Highways, Transportation and Flooding
vi. Councillor Pam Posnett: Lead Member for Community & Staff Relations, Melton Borough Councillor, Melton East
vii. Davidsons Developments Ltd: Southern Sustainable Neighbourhood
viii. Morris Homes Midlands: Northern Sustainable Neighbourhoods
ix. National Highways Support
x. Samworth Brothers Supply Chain: Local Business
xi. Taylor Whimpey: Northern and Southern Sustainable Neighbourhoods
xii. TruFrame: Local Business

Appendix D

MODELLING AND APPRAISAL DOCUMENTS

APPENDIX D: MODELLING AND APPRAISAL DOCUMENTS

i. LLITM Traffic Forecasting Report
ii. LLITM 2014 Base Data Collection Report
iii. LLITM 2014 Base Highway Model LMVR – Local Area Validation
iv. LLITM 2014 Base PT Model LMVR
v. LLITM 2014 Base Demand Model Report
vi. LLITM 2014 Base Local Forecasting Report
vii. LLITM 2014 Base Highway Model LMVR
viii. Economic Assessment Report

Appendix E

CONSULTATION REPORT

Appendix F

APPRAISAL SPECIFICATION REPORT

Appendix G

APPRAISAL SUMMARY TABLE

Appendix H

TAG WORKSHEETS

Appendix I

SCHEME DRAWINGS

Appendix J

ACTIVITY SCHEDULE

Appendix K

RISK REGISTER

Appendix L

S151 LETTER

Appendix M

SCHEME PLANNING APPROVAL

Appendix N

SCHEME PROGRAMME

Appendix O

COMMUNCATION PLAN

Appendix P

MONITORING AND EVALUATION PLAN

Appendix Q

OTHER SUPPORTING DOCUMENTS

First Floor
3 Wellington Place
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wsp.com