

Melton Mowbray Outline Business Case (OBC)- Executive Summary:

Scheme Description & Overview

The Melton Mowbray Distributor Road (MMDR) scheme represents the best performing option from a comprehensive options assessment exercise, and consists of the construction of a single carriageway road, to the east of Melton Mowbray.

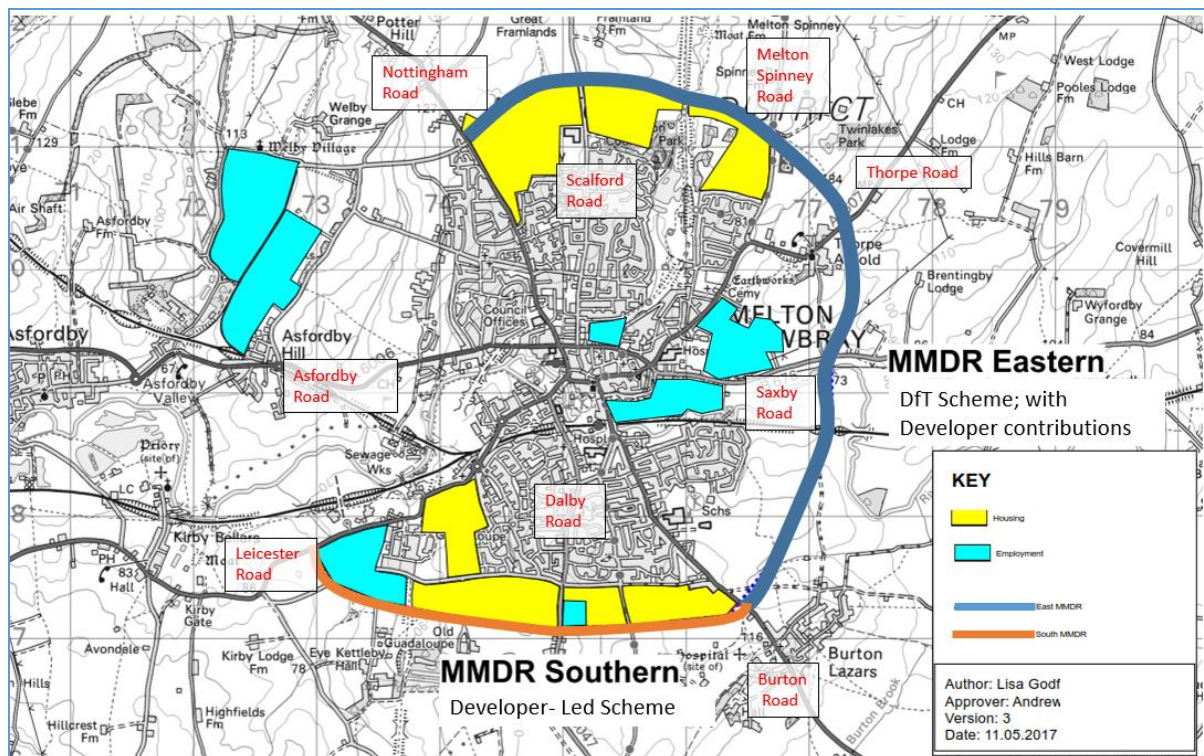
The 6.9km, single carriageway road, extends from the A606 Nottingham Road at the north-western edge of the town to the A606 Burton Road in the south, crossing Scaford Road, Melton Spinney Road, A607 Thorpe Road and B676 Saxby Road to Burton Road.

It will provide connection to a developer-led masterplan to the south of Melton Mowbray, which in turn 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.

Walking and cycling facilities are to be provided alongside the carriageway for the full extent of the route.

The location of the proposed scheme and of key adjoining roads is shown below. DfT funding is being sought for the part of the road shown in blue, that is, from Nottingham Road to Burton Road.

The Southern section, shown in orange, will be provided by the developers as part of the current planning application for 1,450 dwellings and associated employment to the south of Melton Mowbray.



Background

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

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

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.

Importantly, a significant number of dwellings (totalling more than 2,500) are currently part of active planning applications in the town - as part of the emerging Local Plan delivery of over 4,500 dwellings in Melton Mowbray.

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.

Importantly, this scheme is just 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.

Strategic Case:

Existing Issues

As part of the process of developing the transport strategy for Melton Mowbray, detailed 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 emerging Local Plan has developed.

These documents have been used, together with the recently updated LLITM model (in 2017 to a 2014 base), to inform and evidence the current traffic-related problems and issues in Melton Mowbray.

These are as follows:

1) Highly Significant Levels of Congestion

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 a number of critical junctions.

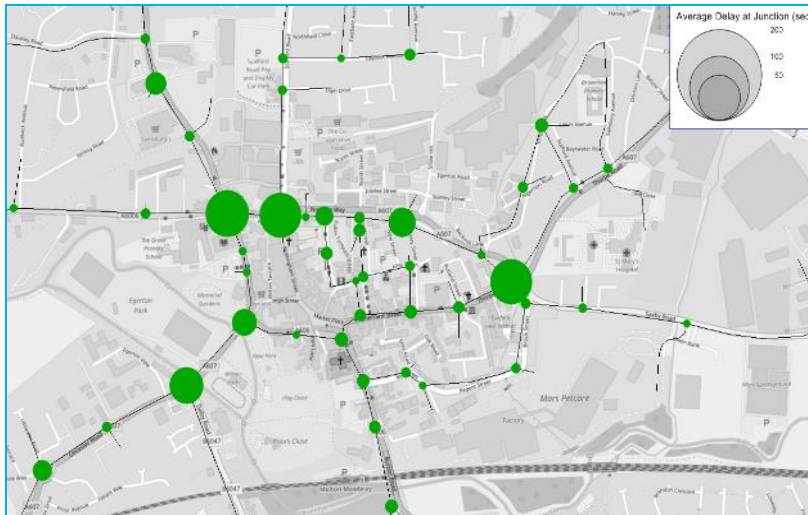
The extent of congestion is therefore right across the town, and covers all cross-town routes. This represents a key point in terms of the need for intervention. This congestion arises due to the extent of through traffic, intra-town traffic, and traffic with destinations in Melton Mowbray itself, alongside network capacity that is limited by the number (and historic scale) of cross town routes, as

well as geographical constraints from the river and rail line that funnel traffic to a limited number of key junctions.

On a delay per mile basis Melton Mowbray has one of the highest levels of delay in any area of Leicestershire, including the City of Leicester.

2) Town Centre Junction Delays

The volume of through traffic passing through Melton Mowbray town centre results not only in congestion on links but also significant delays at numerous junctions across the town centre, as shown below.



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.

Importantly, many vehicles have to pass through several of these junctions to reach, or cross, the town centre, so the overall level of delay experienced as a route extends significantly beyond these levels.

For example, traffic crossing the town centre north-south or east-west would encounter three or four of main delay locations respectively, resulting in a typical (neutral day) delay of 4-5 minutes in total on this part of the journey.

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

3) High Levels of Through Traffic

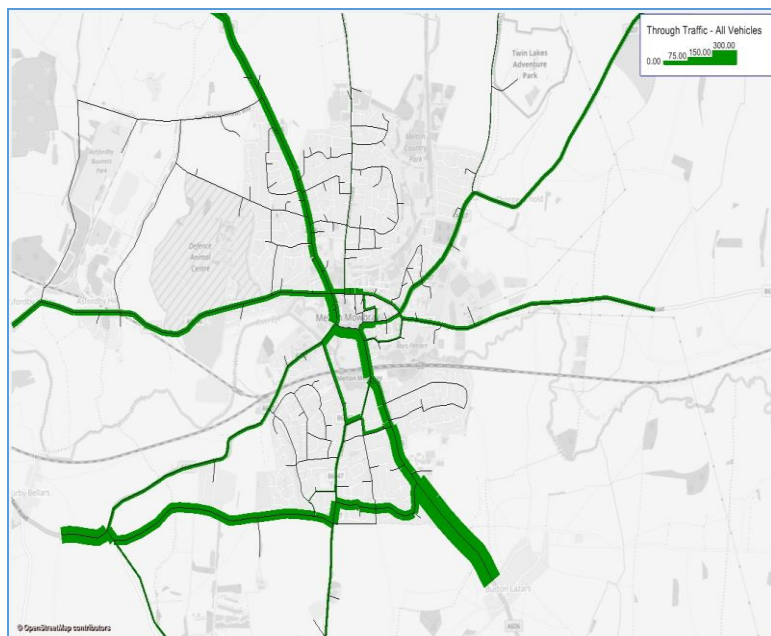
Analysis as part of the LLITM Model and the Transport Strategy Evidence Base notes that through traffic, via Melton Mowbray town centre, is one of the main contributors to heavy congestion during the peak periods.

Of all routes, the largest concentration of through traffic movement is along the A606 axis, constituting more than 40% of total traffic on that route. This is also the most congested on a delay/mile basis and is highly susceptible to variability given it is the only recognised northbound

route through the town. The percentage of through traffic in the east-west direction is also high, at over 30% on these routes.

Total through traffic volumes on all routes across the town currently peak at around 1,100 vehicles per hour (vph) across all-routes, with a daily estimate of around 12,400 vehicles, as shown below.

Through Traffic in the AM Peak in 2014 (All vehicles)



4) HGV Movements through the Town Centre

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

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).

Secondly, there are a significant number of through traffic 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.

There are approximately 2,200 HGVs currently entering the town per day of which 1,200 HGV's (55%) are through traffic. Moreover, 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, especially given Melton Mowbray's growth as a designated Food Enterprise location.

5) Future traffic-related impacts in town centre and villages

LLITM modelling shows that in the future, traffic-related problems and issues are likely to extend beyond the town centre. 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.

As the traffic grows in the future, and as the developer-link road to the south is built out during the 2020's, forecasts suggest that without the scheme, there would be a significant rise in vehicle movements through adjacent local villages.

Impacts of Doing Nothing:

1) A Continuation of Current Transport Problems

Without the scheme, the problems and issues identified will continue and likely worsen. 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.

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 additional rat-running, and further impacts on the attractiveness of the town to the visitor economy, curtailing the extent and attractiveness of the historic market town centre.

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.

As a result of the current network configuration converging on several key junctions, and with the geographical constraints provided by 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.

Considering the existing traffic conditions within the town, further improvements to public transport will also be difficult to bring into practice, alongside the further housing delivery and economic expansion of the town proposed in the emerging Local Plan.

2) Delivery of Housing, jobs and Economic Growth

As noted in the Leicester and Leicestershire Strategic Economic Plan, 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 only 1.3%.

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.

Despite previous investment in highway improvements, there continues to be significant traffic problems in the town and by virtue of this insufficient residual highway capacity to accommodate planned growth. In recent years this has become a constraint on the town's growth; with MBC, as the Local Planning Authority, having been advised by the County Council, as the Local Highway Authority, to consider refusing a number of planning applications on the grounds of severe traffic impacts.

As a result, doing nothing will lead to the above problems and issues slowing (and potentially actually curtailing) the significant levels of economic growth, job creation and housing delivery proposed as part of the emerging Local Plan; requiring over 4,000 dwellings and 6,000 jobs in total in Melton Mowbray.

Importantly, and demonstrative of Melton Mowbray's current vitality, over 2,500 dwellings associated with the emerging Local Plan total are already being actively put forward by developers through the planning process; and that makes the time for investment now.

Investment will also enhance the vitality of the town centre, with the removal of traffic providing opportunities for town centre regeneration and renewal of the urban fabric, as well as providing opportunities for walking/cycling and better bus travel times to ensure that the new housing growth has greater sustainable travel opportunities than those offered presently; and is particularly important given the level of growth in the town.

Alternative Options

The Melton Mowbray Distributor Road scheme has been developed as the best performing option to overcome existing traffic congestion and traffic-related problems. The scheme has been developed from an evidence and objective-led optioneering process, assessing a range of options across modes, and different scales and route(s) of highway intervention in coming to the final preferred scheme.

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

The OAR tested a range of 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, and used local Melton Mowbray transport stakeholder reference groups as part of the decision making process.

The results demonstrated that strategic highways interventions (of various kinds) performed as the highest ranking options, as the only category of options to provide benefits to both current and future residents, and to be able to ensure sufficient longer-term capacity to underpin the ambitious growth proposals in the emerging Local Plan - as a key part of the locally-derived objectives used in the OAR.

Testing of a wide range of more strategic highways options demonstrated that an Eastern 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), as documented in the OAR.

As a result of this evidence, during the summer of 2016, Leicestershire County Council, Melton Borough Council and the Leicester and Leicestershire LEP submitted a bid to the DfT to seek funding towards the further development of the Distributor Road scheme.

The scheme presented in this OBC has been subject to further optioneering through 2017 as part of the OBC development process, using an updated transport model, and updated datasets, that shows the same comparative transport user benefits between the options, reinforcing the earlier evidence through further independent study.

In addition, within the identified corridor the scheme design has been optimised, taking account of costs, land ownership issues and environmental considerations, with a view to securing planning permission in the first half of 2018.

Key Benefits of the Preferred Scheme:

The scheme is consistent with Local, Sub-Regional and National policies, with a particular benefit of the scheme being accelerated housing delivery in support of the 4,500 dwellings in Melton Mowbray proposed as part of the Local Plan, that has recently been submitted for Examination in Public and expected to be adopted in Spring 2018, along with longer term support the investment will make to the aims and delivery objectives of the Strategic Growth Plan.

Melton is a vibrant, attractive and thriving market town, with a strong manufacturing base, significant visitor economy and as a national and international centre of food manufacturing activities. Unemployment in the town is exceptionally low and the scheme helps support delivery of a further 20ha of employment land for business expansion in Melton- as well as resolving current and future HGV issues in the town created by its manufacturing and agricultural base.

The OBC and associated Options Reports indicate that on both quantitative and qualitative bases, that an Eastern MMDR scheme represents the preferred solution.

The preferred scheme has:

- Double the level of user benefits of the next nearest option;
- The greatest benefit to the town centre and critical junctions as a result;
- Significant benefits for both through traffic and for HGV and LGV traffic;
- Support through Consultation results, with a majority of Melton residents having a defined preference for an Eastern Route over other alternatives;
- 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 emerging 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.

Economic Case:

The Economic Case aims to identify all of a scheme's impacts, 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.

The Economic Case has been driven by use of the latest version of the LLITM Model (2014 Base), supported by DfT and industry standard software usage.

The model and appraisal approach has been built in accordance with the Department for Transport's modelling and appraisal guidance (WebTAG), and has been independently assured in terms of its development and usage.

The economic appraisal has been tailored to reflect the needs of the MMDR Outline Business Case, and has specifically monetised: as part of the Benefit Cost Calculation:

- Transport User Benefits (including travel time and vehicle operating cost savings)

- Safety
- Noise
- Air Quality
- Greenhouse Gases
- Active Mode Travel Benefits
- Changes in delays during maintenance
- Delays during construction

These form the core Benefit Cost Ratio (BCR) for the scheme.

Additional valuations of other objectives has also been monetised as part of the Economic Case, and these are included in the scheme's adjusted BCR.

These benefits of the scheme include:

- Journey Time Reliability Benefits
- Wider Economic Impacts

In line with HM Treasury's appraisal requirements, the impacts considered are not limited to those directly impacting on the measured economy, nor to those which can be monetised. The economic, environmental, social and distributional impacts of a proposal are all examined, using qualitative, quantitative and monetised information in the Economic Case. These include impacts on:

- Landscape
- Townscape
- Water
- Biodiversity
- Historic Environment
- Security
- Severance

In assessing value for money, the impact of the scheme on all of these are consolidated to determine the extent to which a proposal's benefits outweigh its costs, and evidence for all of the above areas has been included within the OBC, and reported in an Appraisal Summary Table (AST) required by DfT.

Scheme Benefits

The Economic Case reports the sum of the above calculations. The total present value of scheme benefits is estimated at **£121m** (in DfT's 2010 values and prices).

This is calculated using the above approach for the scheme benefit calculations.

Scheme Costs for Economic Appraisal

Scheme costs used in the Economic Case are as per those in the Financial Case detailed in the next section, and built up from detailed construction, land, preparation and supervision costs associated with the scheme's design; supported by ECI involvement.

Risk allowances have been determined through a detailed Quantified Risk Analysis (QRA), and along with inflation to the year of forecast expenditure are both included in the appraisal.

In addition, and as per DfT requirements, a further 15% Optimism Bias has been applied to the risk adjusted capital costs of the scheme, with additional uplifts for structures.

Future costs of maintaining the new infrastructure have also been calculated, termed the capital costs of maintenance, and these have also been added to the costs used in the Economic Case.

These calculations lead to a present value of scheme cost (PVC) of **£58m** (in DfT's 2010 values and prices).

Benefit Cost Ratio (BCR)

The core Benefit Cost Ratio for the scheme has been calculated on the basis of the scheme benefits and scheme costs above.

This results in the outturn BCR for the scheme being >2.

A Value for Money Statement is included in the Economic Case, as required by DfT, and which confirms this is High Value for Money in the most likely, core scenario.

High/Low Traffic growth sensitivity tests have also been undertaken as per DfT requirements, with core transport benefits forecast to be 20% lower under the low traffic growth scenario, and 24% higher under the higher growth scenario requested by DfT.

All results are reported in the AST for the scheme, and include detailed distributional analysis as required by guidance.

Financial Case:

The Financial Case concentrates on the affordability of the proposal, its funding arrangements and technical accounting issues.

Scheme costs for the Financial Case have been built up from detailed construction, land, preparation and supervision costs associated with the scheme's design; supported by ECI involvement.

The base scheme costs are **£63m** in 2017 prices, and include land costs, preparation costs, construction costs and supervision costs.

The full OBC will include a more 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.

An independent surveyor's report verifying cost estimates has been submitted as part of the OBC.

The total local contribution towards the risk adjusted scheme cost is in excess of 20%, comprised of local and private sector contribution.

A signed letter from LCC's Section 151 Officer has been included in the Outline Business Case confirming the above.

Commercial Case:

The Commercial Case provides evidence on the commercial viability of a proposal and the procurement strategy that will be used to engage the market. It presents evidence on risk allocation and transfer, contract timescales and implementation timescale as well as details of the capability and skills of the LCC team delivering the project.

As part of the Commercial Case a series of procurement options have been identified and assessed by LCC.

The Preferred Option for procurement and Delivery is the Midlands Highways Alliance (MHA) Framework.

The benefits of this route for both LCC and ensuring taxpayer value have been made clear in the Commercial Case. These benefits are as follows:

- Obtain contractor experience and input to the construction programme to ensure the implementation programme is robust and achievable. Significant savings can be made by allowing the contractor input into the design process through the MHA route- with an ability to engage with the project framework contractor or contractors at an early stage.
- Allow mobilisation quickly and allows greatest time and opportunity for ECI to achieve lowest outturn cost.
- 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. This thereby reduces risks to a level that is 'as low as reasonably practicable'
- Use of an NEC3 contract, with mature and well established risk allocation and transfer between parties; along with established tolerances to provide greater cost and programme certainty.
- The ability to measure performance through the Framework Community Board, including benchmark MSF projects against projects delivered through other routes
- Collaboration and shared learning. The FWCB hold meetings regularly, usually every two months.

A strategic aim and objective of the MHA is the sharing of risk and that risk is appropriately proportioned through the careful management of relationships within, and throughout the project.

The Commercial Case, using existing details from the MHA framework, describes how the Midlands Highway Authority procurement strategy will seek to place risk with the party best placed to manage or mitigate that risk, or manage the consequences should they transpire.

Early involvement with the contractor will include an assessment of the appropriate balance of risk.

Through to procurement and as part of scheme delivery, the contractor will produce a priced risk register. This will be reviewed as part of the process of target setting and decisions made on the mechanism for sharing risk between the contractor and LCC, ensuring that the proposed allocation provides the best value for money for the project.

The above approach builds on LCC experience with such delivery mechanisms on recently 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 assesses whether the scheme is capable of being delivered successfully in line with the recognised best practice. It describes the processes that are being put in place to ensure that the project is effectively delivered.

The management case demonstrates that LCC has 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 MMDR. Opportunities will be taken, wherever possible, to improve delivery processes by acting upon the lessons learnt from recent schemes.

Carillion Tarmac Partnership (CTP) were appointed through the Midlands Highways Alliance Medium Schemes Framework contract to work with Leicestershire County Council (LCC) and their designers, AECOM, to deliver an Early Contractor Involvement (ECI) service for the proposed Melton Mowbray Distributor Road (MMDR).

To ensure the successful delivery of the schemes within its jurisdiction LCC has established a governance structure which will also be applicable to the MMDR. 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 will continue to be reviewed and updated on a monthly basis to consider risks associated with the preferred scheme, and to provide up-to-date input in line with the Project Governance.

The management processes will also make use of best practice Gateway approvals and independent assurance, to ensure effective scheme development, probity and assurance as the scheme progresses.

The Project Governance Structure for any scheme undertaken by LCC consists of a three tier structure as follows:

- The Programme Board – Provides governance at the overall programme level via a Programme Board and a Promoters Group.
- The Project Board – Provides governance at the component project level via specific Project Boards for each component project.
- Working Groups – Responsible for particular issues, topic areas or activities spanning two or more of the component projects via a series of Working Groups.

An outline Monitoring and Evaluation Plan and Benefits Realisation Plan has been prepared, that enables the benefits and dis-benefits from the project to be planned, tracked, managed, and realised (or mitigated). 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 MMDR scheme in particular has the adequate project management, governance and assurance systems in place, alongside resources required, to deliver the MMDR.

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