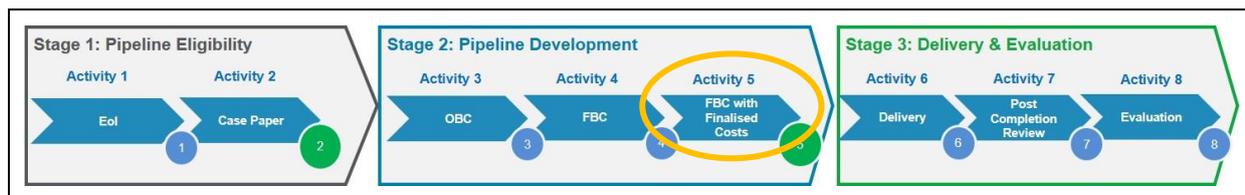


Scheme Summary

Name of Scheme:	East Leeds Orbital Ring Road – Outer Ring Road Junctions
PMO Scheme Code:	WYTF-PA4-025b
Lead Organisation:	Leeds City Council
Senior Responsible Officer:	Oliver Priestley
Lead Promoter Contact:	Oliver Priestley
Applicable Funding Stream:	West Yorkshire Plus Transport Fund
Growth Fund Priority Area (if applicable):	4 – Infrastructure for Growth
Forecasted Full Approval Date (Decision Point 5):	14 th December 2017
Forecasted Completion Date:	April 2019
Total Scheme Cost (£):	£14.046m
WYCA Funding (£):	£14.046m
Total other public sector investment (£):	£0
Total other private sector investment (£):	£0
Is this a standalone Project?	No
Is this a Programme?	No
Is this Project part of an agreed Programme?	East Leeds Orbital Ring Road
Current Funding Allocation:	£10.65m

Current Assurance Process Activity:



Scheme Description:

East Leeds Orbital Ring Road (ELOR) is a new 7km road linking the Orbital Ring Road (ORR) at Red Hall, around the east side of Leeds to Thorpe Park. This will be a 50mph dual carriageway with pedestrian and cycle infrastructure. The ELOR package also includes improvements to the A6120 and sections of the Outer Ring Road (ORR) to the West of Red Hall Lane. The ORR sections are being procured through the same construction package but will be delivered as an early phase of construction.

The project has not changed since it was approved at Gateway 1 (GW 1). Further work has been undertaken since GW1 to complete engineering, design, public consultation and preparation for planning and procurement. The scheme remains as previously outlined but there is now greater certainty of cost and deliverability.

Leeds City Council (LCC) have agreed to bring forward the Outer Ring Road elements of the ELOR package in order to accelerate delivery of the scheme. This paper is being brought forward under the PMO process at decision point 5, (Full Business case + costs) for the advanced junctions only.

During this Appraisal process it has been identified that the full re-modelling of the scheme which should have been made available at FBC (full business case) is not yet completed. LCC have been under constraints resulting from the availability of the new Leeds Transport Model (LTM). This new model is not yet fully available and therefore the intention is that the full ELOR scheme is re-modelled as soon as the LTM is available and a revised decision point 4 is submitted then with a full appraisal of the Business Case. Providing a FBC using the old model would not have given any different outcomes from those provided in previous Gateway papers and Outline Business Case.

The ELOR scheme is to support the development of East Leeds Extension. This is a 225ha major housing development area to the East of Leeds, and a 638ha development area for employment uses. The local development framework core strategy for Leeds district sets out the broad spatial and planning use framework for the Leeds District to 2028. Central to the delivery of this strategy is the need to plan for the people and places of Leeds in a sustainable way and to meet the needs of anticipated population growth through the allocation of land for 70,000 new dwellings over the plan period.

The ELOR package is key to unlocking the necessary development land to enable this strategy to be realised.

The junction improvements support the delivery of the main ELOR scheme and will result in improved traffic flows and reduced congestion along the ORR.

Business Case Summary:

<p>Strategic Case</p>	<p>The justification of the strategic case for these advanced junctions work has not been undermined in this FBC submission. The information set out in the February 2017 submission remains valid, with the following additional beneficial information now being presented in this activity 5 FBC submission:</p> <ul style="list-style-type: none"> • The junctions have been designed to reflect ‘Green Street’ principles. This will ensure the final designs complement and enhance existing levels of green infrastructure both at the affected junctions and along the route. This will support WYCA Policy and will support improved air quality and public acceptability • The final junction designs provide significant enhancements for pedestrian and cycle activity, along with bus detection and priority on the key radial routes. These junctions currently provide poor levels of accessibility, with associated safety, severance and air quality issues • The final junction design offer significantly expanded highway capacity which will eliminate congestion, and provide expanded highway capacity, reduced delays and provide safer traffic interactions for local, longer distance and strategic traffic movements. • The wider network enhancements will provide wider network improvements to key growth destinations including the Airport, Thorpe Park and East Leeds Extension (ELE) • The design of the junctions in question has been undertaken to reflect the potential demand assuming the rest of the ELOR project is completed and ELE is delivered. This is a sensible approach and, while the economic case is not predicated on these assumptions (see below), the additional capacity of the junctions will not be compromised • The continuation of junction improvements along the Northern Outer Ring Road compliments improvements at other junctions that have been upgraded recently (Horsforth Roundabout and Rodley Roundabout) or are included in other ongoing programmes (e.g. the Corridor Improvement programme includes Dawsons Corner and Fink Hill). • One ‘missing’ junction in this overall NORR strategy is the A660/A6120 (Otley Road) junction which was to have been included in the Bew Generation Transport (NGT) project, but which is now being considered as part of the Leeds Public Transport Investment Programme (LPTIP) programme
<p>Commercial Case</p>	<p>Following the recommendations from Programme Appraisal Team (PAT) in February 2017, LCC have been through a robust process to base costing for the construction of these junctions on tendered prices. Following a fully compliant EU Procurement Processes and a pre-qualification process a total of 12 returns were received and short-listed to 6 tenderers. LCC have evaluated the 6 returns and are now able issue a contract. This will need to be done by 28 December in order to hold the quoted prices. This is clearly dependent upon getting West Yorkshire Combined Authority (WYCA) approval for the release of funds (due at the December meeting).</p>

	<p>The advance junction construction works will be procured as a New Engineering Contract 3 (NEC3) Engineering and Construction Contract Option C. This will be a target contract with an activity schedule.</p> <p>An approach to risk allocation and transfer has been included within the contract to reflect ongoing risks covering: engineering, planning and site supervision, statutory undertakers. Ground conditions and contractual/construction issues. A Contract length has been identified of around 15/16 months, from being on site in January 2018 to completion during April 2019. The robust approach will include an approach to share saving and fund additional costs which will manage to reduce potential costs increases, based around a shared approach to pain/gain.</p> <p>Commercially LCC are well experienced in managing significant highway improvement works, particularly while maintaining on-going traffic operations. LCC will continue to develop and deliver the project using PRINCE methodology.</p>
<p>Economic Case</p>	<p>The scale of additional capacity and the design specification for these junctions has been based on future scenarios which include additional demand generated by ELOR and the new housing it unlocks. However the quantification of the benefits are set against that level of additional travel; demand not occurring.</p> <p>In summary, the design (and costs) are future-proofed to accommodate full growth, while the benefits are limited to background growth traffic only. This is very prudent/conservative approach to economic appraisal and gives a very conservative set of Benefit to Costs (BCRs).</p> <p>The danger of this approach is that if the remainder of the ELOR projects (and the ELE housing growth) does not occur, then the advance junctions would be over-designed. However the scale of BCR (even with high costs and low benefits) suggest that they would continue to offer 'good value for money' even if the full scheme does not proceed.</p> <p>The quantification of costs used in the production of a BCR is well set out. The delivery/construction costs are clearly robust, coming as they do from tendered cost estimates. The construction costs include additional cost to determine a present value of whole life costs. These cover: operating costs, major maintenance (regular and appropriate resurfacing and reconstruction), non-highway maintenance (e.g. lighting, drainage, signals, landscaping). The</p>

provision of these new junctions will actually reduce ongoing operating costs when compared to the 'Do Minimum' scenario which will result in ongoing revenue savings for LCC. (circa £200,000 per year).

All these whole life costs have been calculated using local data and supplemented/validated using WebTAG values where appropriate.

The value of benefits has been calculated following discussion with WYCA officers. Each junction has been assessed using standard junction software models (namely ARCADY and TRANSYT), under before and after scenarios. Impacts have been modelled for weekday AM, Inter Peak and PM peak hours. These have then been 'annualised' using local data in a conventional and well established way.

The modelling forecasts significant time savings, accident reductions and significantly reduced congestion, from the modelled forecast years of 2021 and 2036. This is most apparent in the AM and PM peak hours.

The benefits have been modelled without the ELE and the rest of ELOR being in place. If this scenarios had been modelled, the benefits would be even higher. As is standard, a 60 year appraisal period has been used.

The overall BCR value for money measure, using these conservative level of benefit is 2.34:1, with a Present value of benefits (PVB) of £28.0m against a Present Value of Costs (PVC) of £11.8m. The BCR has been calculated for the three junctions as a package, and is not presented discretely for each junction. This is appropriate given the strategic approach would require full treatment along the whole corridor. Moreover the benefits do not include accident savings which would arise from the signalisation of the existing roundabouts, and the provision of dedicated cycle and pedestrian phases which are not in place in the current layouts. Including these benefits would further increase the BCR.

Financial Case

The cost for the construction of these three advance junctions are informed by tendered returns, and are broken down into the following:

Works estimate	£8,250,000
Preliminaries and ancillary works	£300,000
Statutory undertakers	£3,000,000
Land and property	£0
Supervision and management	£700,000

Sub Total	£12,250,000
Inflation	£28,987
QRA	£1,767,260
TOTAL	£14,046,247

Land is in at zero cost, in that no further land will be required from third parties and is fully available to deliver the junction improvement works since it is in LCC ownership.

Funding for these advance works is available from the Transport Fund element of the Growth Fund allocation, but LCC need to provide reassurance that they will still be able afford the overall costs of delivery of the project with a capped total of funding being available from the growth fund.

Providing funding for these advance junction works at the scale of funding requested, would leave a balance of some £55m available to provide to LCC to co-fund the development and delivery of the balance of the project.

LCC have previously identified that the combination of Transport Fund allocations, third party funding and funds generated from a local 'roof tax' on houses within the ELE will meet the overall funding requirements for the delivery of the wider ELOR project including these advance junction works.

Management Case

From a management point of view, LCC have an established, proactive and very active governance structure in place. They will continue to manage the delivery of this project on time and on-budget. They have recent and relevant experience in managing significant highway improvement works, particularly while maintaining on-going operations. The team involved have overseen the in highway delivery of significant junction improvements over recent years, e.g. A65 Kirkstall Road, Rodley Roundabout and Thornbury Roundabout, all of which were delivered to time and budget.

Moreover, the governance and management of the construction works will be supported by WSP who working collaboratively with LCC as their Strategic Partner.

The ELOR (incorporating these advance junctions) is a key priority for LCC, unlocking 5,500 new homes and contributing to LCC housing targets. It is strong backing at all levels of the Council and is being effectively managed and supported at the highest level.

