Leeds CITY COUNCIL

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Report to the Chief Officer (Highways & Transportation)

Date: 3 December 2019

Subject: Leeds Transport Model Update 2020

Capital Scheme Number: 33255

Are specific electoral wards affected? If yes, name(s) of ward(s): All wards	☒ Yes	☐ No
Has consultation been carried out?	☒ Yes	☐ No
Are there implications for equality and diversity and cohesion and integration?	☐ Yes	☒ No
Will the decision be open for call-in?	☒ Yes	☐ No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number:	☐ Yes	☒ No

Summary

1. Main issues

- The current version of the Leeds Transport Model (LTM) will be five years old in 2020. Additionally, the majority of the origin-destination data underlying the model dates from 2008/09. To meet Department for Transport (DfT) guidance on model performance it needs to be updated. This will allow progress to continue be made on the development of scheme business cases for existing and future transport interventions. Without an updated model there is a very high risk that the age of the model will become an issue, affecting the Council's ability to obtain funding for major transport schemes from West Yorkshire Combined Authority (WYCA) and the DfT.
- The development of major strategic transport models such as the LTM is a time consuming and data dependent process. Data collection needs to take place during neutral months (essentially the spring and autumn), avoiding school holidays and major disruptions such as roadworks.
- Given the age of the existing model and the number of major transport schemes planned for Leeds over the forthcoming years, it is considered imperative that the data collection occurs in spring 2020. This would deliver a model by the end of 2021 or early 2022. Beyond that date the next suitable opportunity is likely to be spring

2024, with the model not being available for use until late 2025 or 2026. Delays will result in continuing reliance on the existing model and the associated risks regarding its suitability.

2. Best Council Plan Implications

- The availability of an up to date strategic transport model will be an essential tool in supporting the provision of transport infrastructure across the city, and therefore contributing towards the vision for Leeds 2030 to be the best city in the UK, and the following Best Council priorities:
- Inclusive Growth (supporting growth and investment, helping everyone benefit from the economy to their full potential); and
- Sustainable Infrastructure (improving transport connections, safety, reliability and affordability).

3. Resource Implications

- It is anticipated that 50% of the cost of the new LTM will be provided by WYCA with the remainder coming from the Leeds City Council Highways and Transportation budgets.
- In order to meet the deadlines associated with data collection during the spring of 2020 it is proposed to undertake the work within a two stage contract, with the data collection exercise forming stage 1 and the model build stage 2. This will allow the WYCA funding approval process to proceed in parallel to the model procurement.

Recommendations

The Chief Officer (Highways & Transportation) is requested to:

a) Note the contents of the report; and

b) Give authority to incur expenditure of £600,000 which will be funded from Leeds City Council Highways and Transportation budgets.

1. Purpose of this report

1.1 To seek approval to spend to update the Leeds Transport Model.

2. Background information

2.1 In order to provide the supporting evidence for scheme appraisal and business case development it is critical that suitable, robust, up to date modelling tools are available. In recent years this has been provided by the Leeds Transport Model (LTM). This was first developed in 2008/09 and this was updated 2015, although the underlying origin-destination information remains that obtained in 2008/09.

2.2 By its nature, the existing LTM is an extremely complex model which results in lengthy run times and the use of multiple software packages. It is expected that improvements in computing power and software development will enable the creation of a new model that is more streamlined and efficient.

2.3 The availability of an up to date transport model is essential in order to unlock external funding from WYCA and DfT for major transport interventions. In the past

this has included Briggate closure and the City Centre Loop Road, Leeds Inner Ring Road Stages 6 and 7 and East Leeds Link Road.

2.4 The LTM has been used to support the business cases for the Woodhouse Tunnel Major Maintenance scheme, East Leeds Orbital Route and Housing Infrastructure Fund bid as well as allowing a comprehensive assessment of the Leeds Site Allocations Plan to be undertaken to inform the Examination in Public. Currently the LTM is being used for the City Centre Package and LPTIP programme – a total value of investment of over £300M.

2.5 Future work programmes for the updated model are likely to include A6110 enhancements, A6120 Western Outer Ring Road improvements, and proposals for Mass Transit. It will also be used to assess land use changes arising from the next round of the Site Allocations Plan.

3. Main issues

3.1 DfT guidance indicates that transport models such as the LTM need to be updated every five years. With a 2015 base year, and compounded by the age of the underlying origin-destination data, the current version of the LTM is therefore reaching the end of its suitable lifespan.

3.2 Given the scale of transport interventions currently being developed and delivered across Leeds it is important that models can reflect the spatial impact of these schemes across the city. To that end it is considered critical that Leeds maintains a strategic modelling capability that can not only reflect these initiatives in full but also the impact of planned development across the city and city region.

3.3 Without an update to the LTM the risk of model age and suitability will increase, and ultimately this will severely limit the ability of the Council to gain external funding from WYCA or the DfT to support transport interventions in Leeds. Additionally, it opens the Council up to challenge at public inquiry if the model used to support a scheme fails to meet DfT guidance.

3.4 Model development is a lengthy and complex process. It is also data intensive, requires extensive and potentially disruptive surveys, and is costly. By necessity it is important to undertake data collection during neutral months and when traffic conditions are unaffected by major roadworks. Delivery of a usable model that meets DfT performance standards can easily take several years.

3.5 It is therefore considered imperative that the progression of an update to the LTM needs to commence in 2020 so that it can be available for use before the age of the existing model starts to become an issue.

3.6 Major roadworks around Leeds city centre are expected to start in 2020 to reconstruct Regent St Bridge and to deliver the Armley Gyratory upgrade and in early 2021 the M621 Junction 1-7 RIS scheme. It is considered critical that any data collection is undertaken prior to the start of these works on site. The impact of these schemes on the heavily trafficked Inner Ring Road and M621 is likely to disrupt traffic patterns across the city, far more than any of the individual LPTIP interventions, though they will not be without their impacts. Given the age of the LTM it is not practical to wait until these schemes are completed as the next suitable survey window will not occur until spring 2024 (to allow traffic levels to settle down after completion of the City Centre Package works). This would result in a continuing reliance on the existing model until late 2025 or 2026.

3.7 It is proposed that data collection for the updated LTM needs to take place during the spring of 2020 (April-June), with completion of the model itself by the end of 2021 or early 2022.

3.8 The updated LTM will provide a consistent up to date baseline model for the whole District. As major projects are developed it is anticipated that local enhancements may be required to the LTM in the vicinity of the schemes, which would result in the development of a series of 'daughter' models. The costs of this would be funded from the individual scheme development budgets. In the absence of an updated LTM the costs and time associated with developing robust scheme specific models would be considerable.

3.9 Given the complex nature of the LTM and similar models it is considered essential that a single consultant is appointed to deliver the model, including the specification, planning and procurement of all necessary data collection.

3.10 The proposed two stage contract would facilitate the early progression of the data collection exercise in order to meet the spring 2020 survey window, while permitting the agreement of funding from WYCA to be progressed in parallel.

4. Corporate considerations

4.1 Consultation and engagement

4.1.1 The updated transport model will not itself lead directly to any infrastructure changes that would require public consultation or engagement.

4.1.2 Consultation has been undertaken Finance over the funding options.

4.1.3 Consultation with WYCA over the model specification has been undertaken.

4.2 Equality and diversity / cohesion and integration

4.2.1 The updated transport model will perform a critical role in the appraisal and delivery of new infrastructure across Leeds District, however, in itself it will not have any direct impacts on Equality, Diversity, Cohesion and Integration.

4.3 Council policies and the Best Council Plan

4.3.1 The availability of an up to date strategic transport model will be an essential tool in supporting the provision of transport infrastructure across the city, and therefore contributing towards the vision for Leeds 2030 to be the best city in the UK, and the following Best Council priorities:

- Inclusive Growth (supporting growth and investment, helping everyone benefit from the economy to their full potential); and
- Sustainable Infrastructure (improving transport connections, safety, reliability and affordability).

<u>Climate Emergency</u>

4.3.2 The updated LTM will be an essential tool to permit the forecasting of future traffic levels and assessments of the carbon implications of major transport interventions.

4.4 Resources, procurement and value for money

4.4.1 The estimated overall value of the contract is expected to be in the order of £1.2M. The initial £600k will be funded from Leeds City Council Highways and Transportation budgets. An application for the remaining 50% (£600k) funding from WYCA is being progressed in parallel to the model procurement.

4.4.2 Existing frameworks have been investigated to ascertain if any provision currently exists. There is one framework contract available which relates to this type of work. It is proposed to use the WYCA Specialist Framework contract utilising LOT 10 of the framework – Transport Planning, Modelling and Economic Development. Expressions of interest will be sought from the 21 companies that are currently listed in LOT 10 and then to carry out a restricted tendering exercise on YORtender.

4.4.3 The update to the LTM will potentially unlock WYCA and DfT funding in the transport infrastructure of Leeds worth hundreds of millions of pounds over the next decade.

4.4.4 Budget and funding profile

Funding Approval :	**Capital Section Reference Number :-**						
Previous total Authority to Spend on this scheme	**TOTAL £000's**	**TO MARCH 2018 £000's**	**FORECAST 2018/19 £000's**	**2019/20 £000's**	**2020/21 £000's**	**2021/22 £000's**	**2022 on £000's**
LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	0.0						
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Authority to Spend required for this Approval	**TOTAL £000's**	**TO MARCH 2018 £000's**	**FORECAST 2018/19 £000's**	**2019/20 £000's**	**2020/21 £000's**	**2021/22 £000's**	**2022 on £000's**
LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	600.0				270.0	330.0	
TOTALS	600.0	0.0	0.0	0.0	270.0	330.0	0.0
Total overall Funding (As per latest Capital Programme)	**TOTAL £000's**	**TO MARCH 2018 £000's**	**FORECAST 2018/19 £000's**	**2019/20 £000's**	**2020/21 £000's**	**2021/22 £000's**	**2022 on £000's**
LCC - Capital borrowing funding	600.0				270.0	330.0	
Total Funding	600.0	0.0	0.0	0.0	270.0	330.0	0.0
Balance / Shortfall =	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

4.5 Legal implications, access to information, and call-in

4.5.1 There are no specific legal implications included within this report, nor is any information contained within this report deemed to be confidential. All activities relating to the procurement will be executed strictly in accordance with the Councils Contract Procedure Rules.

4.5.2 This is a Key Decision due to the estimated overall value of the contract and is therefore open to call in.

4.6 Risk management

4.6.1 Failure to update the LTM will result in continuing reliance on the existing 2015 model which is approaching the end of its lifespan in terms of meeting DfT guidance. The absence of a compliant model will result in an inability to obtain external funding from either WYCA or DfT to support major transport infrastructure. Additionally, it opens the Council up to challenge at public inquiry if the model used to support a scheme fails to meet DfT guidance.

5. Conclusions

5.1 The current version of the Leeds Transport Model (LTM) will be five years old in 2020. Additionally, the majority of the origin-destination data underlying the model dates from 2008/09. To meet Department for Transport (DfT) guidance on model performance it needs to be updated. This will allow progress to continue be made on the development of scheme business cases for existing and future transport interventions. Without an updated model there is a high risk that the age of the model will become an issue, affecting the Council's ability to obtain funding for major transport schemes from West Yorkshire Combined Authority (WYCA) and the DfT.

5.2 The development of major strategic transport models such as the LTM is a time consuming and data dependent process. Data collection needs to take place during neutral months, avoiding school holidays and major disruptions such as roadworks.

5.3 Given the age of the existing model and the number of major transport schemes planned for Leeds over the forthcoming years, it is considered imperative that the data collection occurs in spring 2020. This would deliver a model by the end of 2021 or early 2022. Beyond that date the next suitable opportunity is likely to be spring 2024, with the model not being available for use until late 2025 or 2026. Delays will result in continuing reliance on the existing model and the associated risks regarding its suitability.

6. Recommendations

6.1 The Chief Officer (Highways & Transportation) is requested to:

a) Note the contents of the report; and
b) Give authority to incur expenditure of £600,000 which will be funded from Leeds City Council Highways and Transportation budgets.

7. Background documents[1]

7.1 None.

[1] The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.