

**Report to the Chief Officer (Highways & Transportation)**

**Date: 14 July 2020**

**Subject: LEEDS TRANSPORT MODEL UPDATE 2020**

**Capital Scheme Number: 33255**

Are specific electoral wards affected? If yes, name(s) of ward(s): All wards	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has consultation been carried out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Will the decision be open for call-in?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 model development commences in spring 2020. This would deliver a model by the autumn of 2021. Beyond that date the next suitable opportunity for new data

collection 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**

- Following a competitive tendering exercise, Aecom and Systra have been appointed to build the model at a cost, including 20% contingencies, of £1M. It has been agreed that 50% of the cost of the new LTM will be provided by WYCA with the remainder coming from Leeds City Council budgets.
- This is a reduction of £0.2M from the previously estimated cost for the model update. Any further savings would be split equally between LCC and WYCA.
- Approval of the WYCA contribution of £500,000 was achieved on 1<sup>st</sup> May 2020 and the LCC contribution was previously approved on 7<sup>th</sup> January 2020.

## **Recommendations**

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

- a) Note the contents of the report;
- b) Give authority to inject £500,000 into the Capital Programme and incur expenditure of £500,000 as the WYCA contribution towards the model update; and
- c) Give approval to enter into a funding agreement with WYCA covering the £500,000 contribution.

### **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 In the light of the impact of the Covid-19 pandemic, the original plans to commence data collection for the model in the spring of 2020 have been abandoned. It is now planned that existing data collected during 2019 will be used as the primary data source for the model. If possible this may be supplemented by surveys in autumn 2020. Completion of the model itself is expected before the autumn of 2021.

3.7 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.

## **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 with 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).

#### Climate Emergency

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 Following a competitive tendering exercise, consultants Aecom and Systra have been appointed to build to model at a cost of £1M, including a 20% contingency. This will be funded jointly by Leeds City Council and WYCA. This is a reduction of £0.2M from the previously estimated cost for the model update. Any further savings would be split equally between LCC and WYCA.

4.4.2 Approval of the WYCA contribution of £500,000 was achieved on 1<sup>st</sup> May 2020 and the LCC contribution was previously approved by the Chief Officer, Hihgways and Transportation on 7<sup>th</sup> January 2020.

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 :-		33255				
Previous total Authority to Spend on this scheme	TOTAL	TO MARCH	FORECAST				
	£000's	2018 £000's	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)	500.0				270.0	230.0	
<b>TOTALS</b>	<b>500.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>270.0</b>	<b>230.0</b>	<b>0.0</b>
Authority to Spend required for this Approval	TOTAL	TO MARCH	FORECAST				
	£000's	2018 £000's	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)	500.0				500.0		
<b>TOTALS</b>	<b>500.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>500.0</b>	<b>0.0</b>	<b>0.0</b>
Total overall Funding (As per latest Capital Programme)	TOTAL	TO MARCH	FORECAST				
	£000's	2018 £000's	2018/19 £000's	2019/20 £000's	2020/21 £000's	2021/22 £000's	2022 on £000's
LCC - Capital borrowing funding	500.0				270.0	230.0	
WYCA Capital receipts	500.0				500.0		
<b>Total Funding</b>	<b>1000.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>770.0</b>	<b>230.0</b>	<b>0.0</b>
<b>Balance / Shortfall =</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

#### 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 not classed as a Key Decision as approval was originally obtained on 7<sup>th</sup> January 2020 and this report relates only to the WYCA contribution.

#### 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 model development commences in spring 2020. This would deliver a model before the autumn of 2021. Beyond that date the next suitable opportunity for new data collection 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;
  - b. Give authority to inject £500,000 into the Capital Programme and incur expenditure of £500,000 as the WYCA contribution towards the model update; and
  - c. Give approval to enter into a funding agreement with WYCA covering the £500,000 contribution.

## **7. Background documents**

- 7.1 None.