

**Report of UTMC Manager**

**Report to Chief Officer Highways & Transportation**

**Date: 10 September 2019**

**Subject: Approval to implement West Yorkshire Integrated Urban Traffic Management Control (UTMC) – Element A: Traffic Signals Improvements at junctions on the West Yorkshire Key Route Network.**

**Scheme No: 33208**

Are specific electoral wards affected?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, name(s) of ward(s): Ardsley & Robin Hood, Morley South, Morley North, Beeston & Holbeck, Middleton Park, Farnley & Wortley and Pudsey.	
Has consultation been carried out?	<input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the report contain confidential or exempt information?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, access to information procedure rule number:	
Appendix number:	

**Summary**

**1. Main issues**

As part of the transport strategy the Council is developing and upgrading its traffic signal control systems to meet the challenges of a growing 'core city'. In 2017, funding was secured from the Department for Transport (DfT) to upgrade through the National Productivity Investment Fund (NPIF) to 'kick-start' this process along the A65 corridor. As part of the West Yorkshire Integrated UTMC project, £1,513,539 has been approved by the West Yorkshire Combined Authority to undertake a similar scheme to upgrade traffic signals on the Key Route Network (KRN).

This report seeks approval to implement Element A (on-street improvements to UTC equipment) of the West Yorkshire Integrated UTMC project. The scheme will deliver improvements on the West Yorkshire Key Route Network including the upgrade of ageing asset, replacing obsolete equipment and implementing adaptive control to reduce delays.

The scheme aligns with other major programmes such as the Leeds Public Transport Investment Programme (LPTIP), West Yorkshire Plus Transport Fund (WYPTF), Corridor Investment Programme (CIP) and the Clean Air Zone proposals as it follows the same principles of improving efficiency and improving the level of service for active travel modes.

## **2. Best Council Plan implications**

The Element A scheme will reduce congestion along strategic routes, improve bus journey time reliability and reduce emissions. The reduction in congestion will help to accommodate growth aspirations, whilst the further enhancement of the existing bus priority system promotes inclusive growth. The upgrade of infrastructure to accommodate adaptive control will provide a platform for further innovation and contribute to the aspiration of improving transport connections by enabling better service for active travel modes. The scheme will therefore play an important role in achieving the Best Council Plan Sustainable Infrastructure objectives as well as contributing to the Health & Wellbeing and Inclusive Growth themes.

Improving the efficiency of traffic signal operation through the use of adaptive traffic signal control measures reduces vehicle emissions, contributing to the Clean Air Zone objectives.

## **3. Resource implications**

Approved funding from West Yorks combined Authority on the 21st Dec 2018 allocated a total of £1.51m to Leeds to implement and deliver the Leeds section of the total scheme (£3.8m). £1.38 million works costs and £130k staff costs.

## **Recommendations**

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

- i) Give Approval to Spend for £1.51m (being £130,000 staff design fees, and £1.38m construction costs), fully funded from the WYCA allocation of £1.51m.
- ii) Approve the injection of £1.51m into the Capital Programme, fully funded from the WYCA allocation.
- iii) And to note:
  - a. The scheme proposal as described in section 3;
  - b. Construction of the scheme is programmed to start in January 2020 and be fully operational by March 2021; and
  - c. That the Chief Officer Highways & Transportation will be responsible for implementation.

## **1. Purpose of this report**

- 1.1 This report seeks approval to implement Element A of the WY UTMC project that comprises improvement to traffic signal equipment on the West Yorkshire Key Route Network.

## **2. Background information**

- 2.1 Traffic control systems play a key role as part of the wider investment programmes in the highway and transport network that form the Leeds Transport Strategy. They form the first line of management in terms of the traffic management and minimisation of congestion in the city and contribute important elements of many highway improvement schemes. Improvements are therefore an essential complement to the Public Transport Investment Programme, the investment programme through the West Yorkshire Transport Fund and to the many developer funded schemes that come forward each year to support the new developments and regeneration in the city.
- 2.2 Traffic on major roads in Leeds has risen by approximately 12% between 2000 and 2015. Combined with Leeds' growing population and economy, the failure to make the road network more resilient to dynamic traffic flows will result in further deterioration. This will increase the level of congestion, worsen air quality and reduce the attractiveness of bus travel, potentially deterring modal shift and impacting development viability.
- 2.3 Following the delegated decision from the West Yorkshire Combined authority programme on 12<sup>th</sup> Dec 2018, approval was granted for element A and authority to oversee and direct the £3.8 million expenditure with partners.
- 2.4 The West Yorkshire UTMC project aims to reduce the effects of congestion and the resulting costs to the economy. It is comprised of three distinct elements :  
Element A, improvements to traffic signal facilities at junctions on the West Yorkshire Key Route Network.  
Element B, the joining of all districts' UTC and UTMC systems into central cloud based systems.  
Element C, Reorganisation of West Yorkshire UTC services, combining existing teams to provide improved day to day services from a single location.

## **3. Main issues**

- 3.1 Element A will help to reduce congestion on the Key Route Network within Leeds. It will provide dynamic optimisation of traffic signal timings allowing junctions to adapt to traffic conditions. Additional bus priority enhancements, developed as part of the A65 NPIF scheme, will help to improve bus journey times and bus journey time reliability.
- 3.2 As part of the scheme, a journey time monitoring system will be implemented to provide feedback on development of the control strategies. The monitoring will also improve day-to-day monitoring of the network for incident detection and management.

3.3 The 28 traffic signal sites on the West Yorkshire Key Route Network (WYKRN) that have been initially selected for upgrade of traffic signals equipment, including the implementation of adaptive control and replacement of ageing asset, are listed below. The sites are predominantly located along the A650 between M62 J28 and Gildersome and along the A6110 between M62 J28 and Pudsey. The exact sites that are affected by the scheme will be subject to some change depending on the programme of other highways capital schemes.

770L	Tingley M62 J28 ( Junction 1 + 2)
778L	A650 / Tingley Common
774L	Tingley Bar Gyratory / Bridge Street
775L	Tingley Bar Gyratory / Rein Road
755L	A650 / Askey Avenue
795L	A650 / Spenslea Grove
762L	A65 / Howley Park Road
764L	A650 / Scotchman Lane
754L	A650 / St Andrews Avenue
753L	Bruntcliffe Crossroads
956L	A650 / Turnberry Park
777L	Topcliffe / Dewsbury Road
768L	White Rose pelican
773L	Millshaw / Beeston Ring Road
707L	Ring Rd / Cottingley Drive
725L	A6110 / Elland Rd / Cemetery Gates
717L	A6110 /Beeston Retail Park
716L	M621 Junction 1
220L	Ring Rd / Wheatsheaf
236L	Ring Rd / Royds Hall Road
205L	Ring Rd / Kirkdale Drive
231L	A6110 / Low Mills Road
213L	Ring Rd / Branch Road
214L	Ring Rd / Whincover Drive
204L	Ring Rd / Stonebridge Lane
212L	Ring Rd / Tong Road
228L	Ring Rd / Butt Lane
225L	Pudsey Rd / Wood Lane

3.4 Installation of journey time monitoring equipment will be installed prior to scheme implementation to enable comprehensive monitoring and evaluation.

## **4. Corporate considerations**

### **4.1 Consultation and engagement**

4.1.1 A full business case (FBC) with finalised costs was presented and approved by the WYCA Senior Leadership team on 21<sup>st</sup> Dec 2018, following recommendations from the Programme Appraisal Team (PAT).

4.1.2 Consultation will be undertaken in the wards affected if there is an obvious change to the operation of the signal installation.

## **4.2 Equality and diversity / cohesion and integration**

4.2.1 A screening document has been prepared and an independent impact assessment is not required for the approvals requested.

## **4.3 Council policies and the Best Council Plan**

### **4.3.1 Climate Emergency**

This project contributes towards the “Climate Emergency” commitments by enabling the conversion of halogen asset to low voltage LED which will provide an energy saving of up to 70% on current halogen lamps and significantly reduces the carbon footprint at each site.

The introduction of more efficient control systems will reduce the number of vehicle stops and associated emissions.

## **4.4 Resources, procurement and value for money**

4.4.1 **Scheme Design Estimate:** The estimated total cost for this work is £1.51m, consisting of £1.38m works costs and £130k staff costs. It is proposed to procure the equipment through the contract 3548 Supply & Installation of traffic signal equipment and contract 3430 West Yorkshire traffic signal maintenance. The installation of journey time monitoring will be procured through TMT2 framework contract.

4.4.2 **Capital Funding and Cash Flow:** The estimated total cost of £1,513,539 will be funded through a WYCA allocation as part of the approved £3.8m for the total Element A section of the programme.

LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	0.0						
<b>TOTALS</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>
<b>Authority to Spend required for this Approval</b>							
<b>TOTAL</b>	<b>TO MARCH</b>	<b>FORECAST</b>					
<b>£000's</b>	<b>2018</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>2021/22</b>	<b>2022 on</b>	
	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>
LAND (1)	0.0						
CONSTRUCTION (3)	1380.0	0.0	500.0	880.0			
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	130.0	0.0	50.0	80.0			
OTHER COSTS (7)	0.0						
<b>TOTALS</b>	<b>1510.0</b>	<b>0.0</b>	<b>0.0</b>	<b>550.0</b>	<b>960.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total overall Funding (As per latest Capital Programme)</b>							
<b>TOTAL</b>	<b>TO MARCH</b>	<b>FORECAST</b>					
<b>£000's</b>	<b>2018</b>	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>2021/22</b>	<b>2022 on</b>	
	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>	<b>£000's</b>
WYCA allocation	1510.0	0.0	0.0	550.0	960.0		
Total Funding	1510.0	0.0	0.0	550.0	960.0	0.0	0.0
<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>

Parent scheme number : 33208

Title : WY KRN UTMC

## Revenue effects

None.

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

4.5.1 The Scheme is eligible for call-in as it exceeds the financial threshold and affects multiple wards.

## 4.6 Risk management

4.6.1 The risk with not implementing this scheme would adversely affect traffic journey times on these busy arterial routes in Leeds, replacing the ageing asset on these routes will provide long term reliability of traffic signals.

## 5. Conclusions

5.1 The replacement of ageing / obsolescent traffic signal equipment provides a more flexible, efficient and safe traffic signal network for the benefit of all users. Improvements in junction capacity and vehicle journey times will positively impact commuting traffic and reduce pollution from idling vehicles.

5.2 The West Yorkshire Key Route network (WYKRN) are vital cross border routes that require traffic signal junctions to be working at maximum capacity to improve journey times and reduce pollution levels.

## **6. Recommendations**

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

- i) Give Approval to Spend for £1.51m (being £130,000 staff design fees, and £1.38m construction costs), fully funded from the WYCA allocation of £1.51m.
- ii) Approve the injection of £1,513,539 into the Capital Programme, fully funded from the WYCA allocation.
- iii) And to note:
  - a. The scheme proposal as described in section 2;
  - b. Construction of the scheme is programmed to start in January 2020 and be fully operational by March 2021; and
  - c. That the Chief Officer Highways & Transportation will be responsible for implementation.

## **7. Background documents<sup>1</sup>**

7.1 None.

---

<sup>1</sup> 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.

## Appendix 1

### Equality, Diversity, Cohesion and Integration Screening

As a public authority we need to ensure that all our strategies, policies, service and functions, both current and proposed have given proper consideration to equality, diversity, cohesion and integration.

A **screening** process can help judge relevance and provides a record of both the **process** and **decision**. Screening should be a short, sharp exercise that determines relevance for all new and revised strategies, policies, services and functions. Completed at the earliest opportunity it will help to determine:

- the relevance of proposals and decisions to equality, diversity, cohesion and integration.
- whether or not equality, diversity, cohesion and integration is being/has already been considered, and
- whether or not it is necessary to carry out an impact assessment.

<b>Directorate: City Development</b>	<b>Service area: Transport Policy</b>
<b>Lead person: Joel Dodsworth</b>	<b>Contact number: 3787542</b>

1. Title: **Approval to implement West Yorkshire Integrated Urban Traffic Management Control (UTMC) – Element A Improvements at junctions on the West Yorkshire Key Route Network**

Is this a:

**Strategy / Policy**

**Service / Function**

**Other**

**If other, please specify**

#### 2. Please provide a brief description of what you are screening

The screening process looks at the proposals to refurbish aged traffic signal equipment sites within Leeds. The introduction of this form of control will provide a safer and more efficient service for our customers and allows the traffic signals use up to 70% less energy whilst providing more reliable equipment.

The general view on traffic signal equipment is that it has a life expectancy of around 15 years. In addition, as technology moves rapidly on, a number of the older models become un maintainable due to unavailability of spares. Older equipment can be more unreliable,

leading to longer down time.

The West Yorks Key Route network (WYKRN) are vital cross border routes that require traffic signal junctions to be working at maximum capacity to improve journey times and reduce pollution levels.

Depending on specific site details, new equipment has a lower energy footprint, is more flexible in terms of control, and can be more easily adapted for bus priority. Thus upgrading equipment has benefits for all users

### 3. Relevance to equality, diversity, cohesion and integration

All the council's strategies/policies, services/functions affect service users, employees or the wider community – city wide or more local. These will also have a greater/lesser relevance to equality, diversity, cohesion and integration.

The following questions will help you to identify how relevant your proposals are.

When considering these questions think about age, carers, disability, gender reassignment, race, religion or belief, sex, sexual orientation and any other relevant characteristics (for example socio-economic status, social class, income, unemployment, residential location or family background and education or skills levels).

Questions	Yes	No
Is there an existing or likely differential impact for the different equality characteristics?	X	
Have there been or likely to be any public concerns about the policy or proposal?		X
Could the proposal affect how our services, commissioning or procurement activities are organised, provided, located and by whom?		X
Could the proposal affect our workforce or employment practices?		X
Does the proposal involve or will it have an impact on <ul style="list-style-type: none"><li>• Eliminating unlawful discrimination, victimisation and harassment</li><li>• Advancing equality of opportunity</li><li>• Fostering good relations</li></ul>		X

If you have answered **no** to the questions above please complete **sections 6 and 7**

If you have answered **yes** to any of the above and;

- Believe you have already considered the impact on equality, diversity; cohesion and integration within your proposal please go to **section 4**.
- Are not already considering the impact on equality, diversity, cohesion and integration within your proposal please go to **section 5**.

### 4. Considering the impact on equality, diversity, cohesion and integration

If you can demonstrate you have considered how your proposals impact on equality, diversity, cohesion and integration you have carried out an impact assessment.

Please provide specific details for all three areas below (use the prompts for guidance).

- **How have you considered equality, diversity, cohesion and integration?** (think about the scope of the proposal, who is likely to be affected, equality related information, gaps in information and plans to address, consultation and engagement activities (taken place or planned) with those likely to be affected)

Consultation will be undertaken in the Wards affected if there is an obvious change to the operation of the signal installation.

- **Key findings** (think about any potential positive and negative impact on different equality characteristics, potential to promote strong and positive relationships between groups, potential to bring groups/communities into increased contact with each other, perception that the proposal could benefit one group at the expense of another)

Positive Impacts

- The proposal will make crossing the road easier and safer for people with mobility issues and those who are visually impaired by fitting push button units with both audible and tactile components.
- The equipment currently installed is now at the end of its current life span and can become unreliable if not replaced. New equipment will benefit all users as signal aspects will be more visible and reliable.

- **Actions** (think about how you will promote positive impact and remove/ reduce negative impact)

**5. If you are **not** already considering the impact on equality, diversity, cohesion and integration you **will need to carry out an impact assessment.****

Date to scope and plan your impact assessment:	N/A
Date to complete your impact assessment	N/A
Lead person for your impact assessment (Include name and job title)	N/A

**6. Governance, ownership and approval**  
Please state here who has approved the actions and outcomes of the screening

Name	Job title	Date
Joel Dodsworth	UTMC Manager	10/09/19

**7. Publishing**  
Though **all** key decisions are required to give due regard to equality the council **only** publishes those related to **Executive Board, Full Council, Key Delegated Decisions** or a **Significant Operational Decision.**

A copy of this equality screening should be attached as an appendix to the decision making report:

- Governance Services will publish those relating to Executive Board and Full Council.
- The appropriate directorate will publish those relating to Delegated Decisions and Significant Operational Decisions.
- A copy of all other equality screenings that are not to be published should be sent to [equalityteam@leeds.gov.uk](mailto:equalityteam@leeds.gov.uk) for record.

Complete the appropriate section below with the date the report and attached screening was sent:

For Executive Board or Full Council – sent to <b>Governance Services</b>	Date sent:
For Delegated Decisions or Significant Operational Decisions – sent to appropriate <b>Directorate</b>	Date sent:
All other decisions – sent to <a href="mailto:equalityteam@leeds.gov.uk">equalityteam@leeds.gov.uk</a>	Date sent: