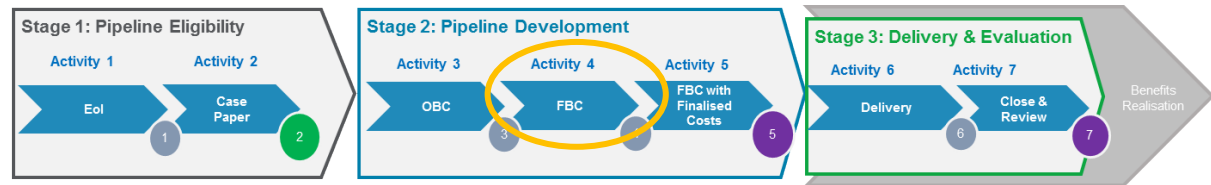


## Section A: Scheme Summary

<b>Name of Scheme:</b>	<b>West Yorkshire Integrated Urban Traffic Management Control (UTMC) Project</b>
<b>PMO Scheme Code:</b>	WYTF-PA4-037
<b>Lead Organisation:</b>	Kirklees Council
<b>Senior Responsible Officer:</b>	David Caborn
<b>Lead Promoter Contact:</b>	Andrew Norman
<b>Case Officer:</b>	Leighton Cardwell
<b>Applicable Funding Stream(s) – Grant or Loan:</b>	West Yorkshire Plus Transport Fund (WY+TF)
<b>Growth Fund Priority Area (if applicable):</b>	West Yorkshire Plus Transport Fund (WY+TF)
<b>Approvals to Date:</b>	
<b>Forecasted Full Approval Date (Decision Point 5):</b>	Nov 2018
<b>Forecasted Completion Date (Decision Point 6):</b>	April 2021
<b>Total Scheme Cost (£):</b>	£7.49m
<b>Combined Authority Funding (£):</b>	£7.49m: West Yorkshire Plus Transport Fund (WY+TF)
<b>Total other public sector investment (£):</b>	Not applicable
<b>Total other private sector investment (£):</b>	Not applicable
<b>Is this a standalone Project?</b>	Yes
<b>Is this a Programme?</b>	Yes
<b>Is this Project part of an agreed Programme?</b>	Yes- KRN

## Current Assurance Process Activity:



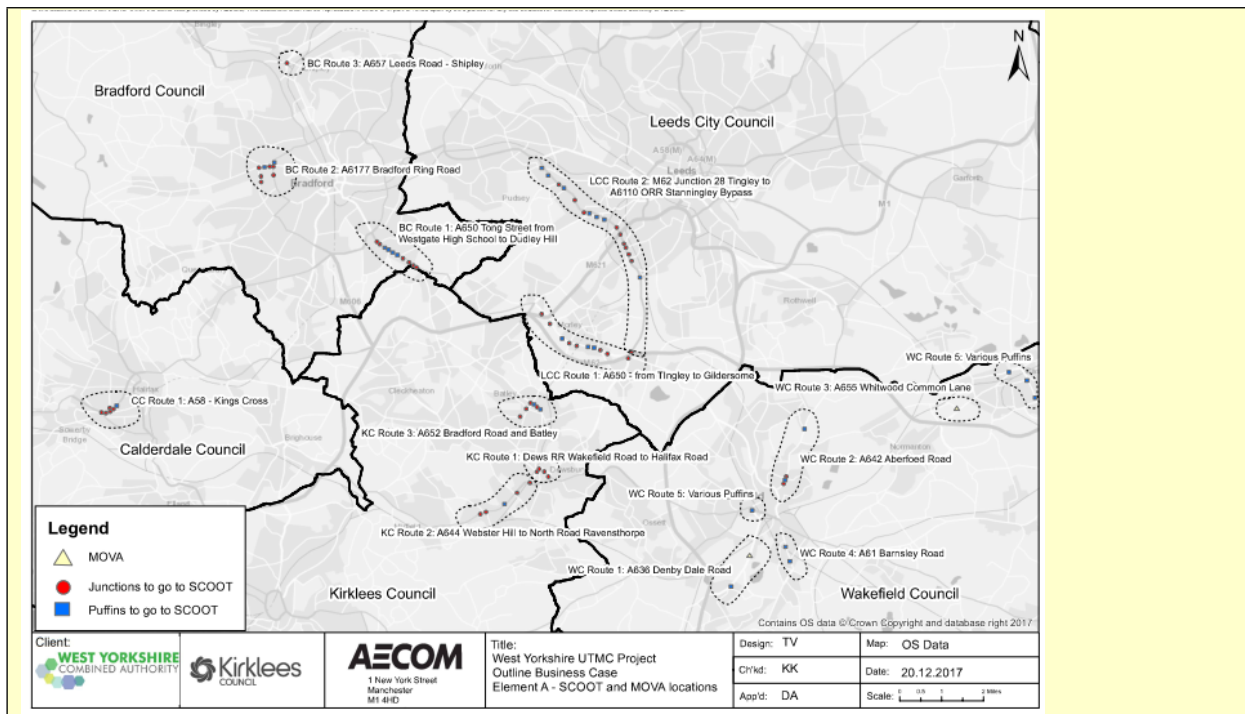
## Scheme Description:

The 2015 WY+TF submission to government included the West Yorkshire Urban Traffic Management Control (UTMC) project. At present, there are four Urban Traffic Control (UTC) teams which operate in West Yorkshire and they use various systems and technologies. Whilst the teams share resources where possible, the service levels and standards vary across boundaries, meaning it is not the most efficient use of resources.

The West Yorkshire UTMC project aims to reduce the effects of congestion and the resulting costs to the local economy. It is comprised of three distinct elements:

- Element A (On-street Improvements to UTC equipment): Improvements to facilities at key junctions on the West Yorkshire Key Route Network (KRN), including the implementation of Split Cycle and Offset Optimisation Technique (SCOOT) and Microprocessor Vehicle Actuation (MOVA) and upgrading obsolete equipment;
- Element B (Cloud Based Combined UTC/UTMC System): The joining of all of the districts UTC and UTMC systems into one central, comprehensive system located in the "cloud" including a common database; and
- Element C (Combined UTMC Service): Reorganisation of West Yorkshire UTC services (combining existing four UTC teams) to provide improved day-to-day management and coordination across the network through an integrated team at a single location. The centre would also be available for use by partners e.g. bus operators, emergency services and Highways England.

The first two elements provide technical improvements to help each of the West Yorkshire districts undertake UTC processes more efficiently. Element A would carry out the necessary improvements on-street to equipment and further detail on the location of these improvements is provided below.



Element B would integrate all traffic signals in West Yorkshire within one common computer system and integrate all electronic traffic management systems across West Yorkshire.

Element C would create a single combined UTMC service for West Yorkshire which would be more resilient and efficient than the existing structure. This would enable better management of the network across District boundaries and also enable staff to spend more time on scheme development work for other WT+TF projects.

Due to differing timescales for element C, a phased approach to delivery is recommended with the technical improvements (elements A and B) implemented in phase 1 and the integrated UTMC service (element C) in phase 2. This is anticipated to include two iterations of the full business case to enable elements A and B to be progressed in the shorter term.

The project is also an enabler to other schemes within the West Yorkshire +Transport Fund, highways efficiency programme, and National Productivity Investment Fund (NPIF) to ensure they fully meet their benefits realisation in unlocking growth. This FBC review is undertaken for elements A and B following, with full business case + finalised costs following receipt of tender prices.

It is currently anticipated that decision point 5 approval will be achieved in April 2019.

Progress is being made on element C, and the location of the new service has been agreed. Letters have been issued to the relevant trade unions. The TUPE process is to affect all staff that spend the majority of their working time delivering the work that will transfer into the new service. Leeds City Council as the lead authority will cover taking on any additional staff.

All staff currently based within the UTMC teams in the affected local authorities have received an initial briefing from their managers, and will be regularly updated as the process progresses.

Each partner council will need to formally approve the proposal to enter into a joint West Yorkshire agreement for the combined service. This is anticipated to be through separate executive board papers (anticipated for September to November 2018). Leaders at the respective local authorities have had visibility of the proposal (i.e. in advance of the proposed approval point) with the scheme previously having gone to Investment Committee / Combined Authority.

As element C is now subject to a separate phase of the full business case, it is therefore not considered any further as part of this full business case review for elements A&B only. The full business case for element C is likely to follow later in 2018 given the further work that is required to develop this element of the project (date to be confirmed).

**Business Case Summary:**

**Strategic Case**

The project will help deliver priority area 4 – infrastructure for growth of the Leeds City Region Strategic Economic Plan (2016).

The proposed scheme would contribute to the following success measures identified for the ‘Infrastructure for Growth’ priority:

- Increases in gross value added and job growth;
- Increases in connectivity bringing people, places and jobs closer together;
- Reduced delays, congestion and faster journey times across all transport modes and both within and beyond the city region; and
- Reduced carbon emissions and vehicle air pollution, contributing to improved environmental quality.

The strategic case is underpinned by congestion levels on the KRN, evident on particular sections of the KRN in locations of schemes, and delays on the highway network can have a considerable impact on productivity and reliability. These impact economic growth.

In addition, congestion on the network also has consequences for local air quality and carbon emissions – it also increases driver frustration regarding delays, raising the likelihood of accidents.

Finally, the travel to work flows across district boundaries highlights the need for an integrated approach to highway management in order to effectively manage flows for those travelling throughout West Yorkshire delivered by the scheme- both through element A, as well as improved co-ordination of assets and their management through elements B and C.

**Commercial Case**

The commercial case details the procurement strategy, and details evidence of some early market testing to demonstrate demand to supply the services- as well as highlighting 28 indirect jobs associated with the scheme.

**Element A (On-street improvements to UTC equipment)**

Several options are presented and works undertaken for element A would be procured and carried out using specialist signal contractors from the West Yorkshire UTMC Supply and Installation Contract, supervised and managed by the West Yorkshire UTMC teams. West Yorkshire local authorities have considerable experience with the contract, with the districts routinely using the framework to meet the procurement needs of the service with respect to the purchasing of equipment for new traffic signal projects together with their installation.

**Element B (Cloud based combined UTC/UTMC system)**

A procurement strategy has been developed but, as with any UTMC/UTC project, the list of suppliers for this bespoke area of works is limited. There are only a handful of suppliers for UTMC systems and only two approved suppliers for the UTC system. There is however greater choice

	<p>and therefore more competition for the professional services and technical support that will be needed for their installation.</p> <p>UTC and UTMC Systems</p> <p>These systems will have to be procured and conform to the EEC OJEU notice regulations owing to the sums involved. As the required systems are bespoke, the intention was this will be procured through the restricted route, however given the limited market an open procedure provides the same advantages, but to quicker timescales.</p> <p>Professional services and technical support</p> <p>Where possible these services will be procured using the Combined Authority framework for specialist services contract awarded in 2016 (for instance business case support). In addition to price, the award of these works packages will also consider the local knowledge of suppliers.</p>
<p><b>Economic Case</b></p>	<p>Elements A and B – A single option has been identified within the short list of options for each element. The appraisal approach is set out within the ASR.</p> <p>Journey time savings were calculated for the AM, IP and PM peak based on Trafficmaster data for defined routes. Delay at junctions was captured as the difference between the overnight period and the peak period. A 12% reduction in delay or Split Cycle and Offset Optimisation Technique (SCOOT) or 13% delay saving for Microprocessor Vehicle Actuation (MOVA) upgrades was calculated at particular junctions to identify the journey time saving.</p> <p>The three elements of the scheme have been appraised at a programme level and at an individual element level to demonstrate the BCR and VfM. The programme (including elements A and B) has a <b>Core Scenario VfM position of 2.08, with medium value for money obtained under low growth (or lower benefit) sensitivity tests.</b> Further work on a combined programme BCR appraisal for elements A, B and C has been undertaken, which demonstrates a <b>medium core scenario VfM position of 1.81.</b></p> <p>In 2018, the Combined Authority modelled element A through the Urban Dynamic Model (UDM) - this resulted in a programme annual net GVA for West Yorkshire of +£2.8m (2009 prices) and 28 West Yorkshire jobs unlocked in a reporting year of 2031, compared to the do-minimum. This equates to a GVA per £ ratio of 2.44 to 1 (2010 prices, 10 year appraisal, discounted).</p> <p>The monetised benefits for element B are constrained to 2% of the medical and ambulance and police costs attributed to accidents in West Yorkshire on the KRN.</p> <p>The value for money assessment for the programme overall is therefore considered conservative with a number of additional benefits that have not been quantified.</p>
<p><b>Financial Case</b></p>	<p>The scheme cost at FBC stage is expected to be £7.49m.</p> <p>The cost variation against the initial indicative allocation of £7.3m (at expression of interest stage) relates to uplift in the costs for inflation (i.e.</p>

approximately £120k for element A and £70k for element B).

Anticipated costs have reduced slightly since outline business case stage, at £7.46m (-£0.029m from outline business case ), however at this stage the original indicative costs of £7.49m are requested.

Summary			
Element A	3.955	Total Cost inc QRA and Contingency	53%
Element B	2.456	Total Cost inc QRA	33%
<b>Total Element A and B</b>	<b>6.411</b>		86%
Element C	1.000	Allocation taken from OBC	13%
Monitoring and Evaluation	0.050	Element A, B and C	1%
<b>Total programme</b>	<b>7.461</b>		100%

*N.B. Costs presented in 2017 values.*

This is profiled as follows:

	WYCA funds (£m)	Applicants' funds (£m)	Other public sector (£m)	Other private sector (£m)	Total Cost (£m)
Year 1 2016/17	0.058	-	-	-	0.058
Year 2 2017/18	0.122	-	-	-	0.122
Year 3 2018/19	0.47	-	-	-	0.47
Year 4	3.87	-	-	-	3.87
2019/20					
Year 5 2020/21	2.90	-	-	-	2.90
Future	0.04	-	-	-	0.04
<b>Total (£m)</b>	<b>7.46</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.46</b>

Inflation and risk have been incorporated as part of the financial case. A quantified risk assessment has been undertaken, and is incorporated along with contingencies at full business case stage, included in the above case.

Some remaining risks to the financial case include:

- **Capital cost overruns:** Whilst the capital costs have been informed by a market engagement event, there remains a risk that these costs could be greater than anticipated. The lack of competition can exacerbate the risk of capital cost overruns, and remains a risk until full business case + finalised costs.
- **Additional ongoing costs:** No additional ongoing costs have been included within the core appraisal but there is a risk that additional costs will be identified. Hosting costs are included within the ten year appraisal period.

	<ul style="list-style-type: none"> <li>- <b>Agreements:</b> An agreement between all five local authorities will be required in advance of implementation with regard to the sharing of liabilities which is to be equally distributed to ensure the host wouldn't be impacted unfairly from a financial perspective.</li> </ul>
<p><b>Management Case</b></p>	<p>The project is being delivered by Kirklees Council on behalf of all five West Yorkshire authorities using the PRINCE2 principles of project management.</p> <p>The scheme is being managed through appropriate governance and day-to-day management of delivery, with recognised and suitable personnel.</p> <p>The overall risk management approach is owned by the Senior Responsible Officer (SRO) with day-to-day management the responsibility of the project manager / business case owner, David Caborn. The approach to risk in this project is managed by utilising the agreed risk register protocols supplied by the Combined Authority.</p> <p>A benefit realisation plan and M&amp;E plan has been developed for full business case , but lacks ownership of key targets, and the mechanics of who, (and how) individuals will be explicitly responsible for the achievement of stated benefits that have been appraised and form the core value for money of the submission.</p> <p>This is intrinsically linked to the specific site implementation plans and monitoring and evaluation requirements for full business case , which whilst presented in overview, programme form in the M&amp;E plan, are recommended to be made more detailed, and with clear ownership, at an individual corridor/ scheme level, and beyond just the SRO to ensure achievement.</p> <p>There is a key risk that on-site implementation and monitoring does not match the appraised benefits and this may impact on the scheme achieving at least medium-high value for money.</p>