

Project Overview

Project Title	Network Management and Enhancement Programme
Main Funding Programme	City Region Sustainable Transport Settlement (CRSTS)
Sub Funding Programme (if applicable)	Not applicable
Current Forecast Project cost	£25,000,000
Funding Applied for from the Combined Authority	£25,000,000

Scheme Description

The programme seeks to address West Yorkshire's ageing traffic signal infrastructure and equipment by replacing and enhancing traffic signals. The programme will deliver new signalised crossings, improved communications equipment and better bus and cycle detection technology. The programme also includes the rapid deployment of LED lamps in traffic signals which will reduce energy costs and lower carbon emissions.

Replacement of ageing traffic signal stock will reduce the risk of faults and failures which result in danger and delays to road users and affect the reliability of the transport network. Enhanced bus detection technology at traffic signals will help to maintain public transport as a viable alternative to car use. Providing new crossings will also remove barriers to cycling and walking and promote a shift away from car use.

The scheme is to be delivered through the City Region Sustainable Transport Settlement (CRSTS).

Business Case Summary

Strategic Case

Higher levels of faults and failures at older traffic signals result in danger and delay to road users and adversely affect the reliability of the transport network. The lack of signalised pedestrian and cycle crossings at some sites also represents a barrier to cycling and walking.

The programme includes replacing and enhancing traffic signals including the provision of new signalised crossing facilities. The improvements will lower the number of traffic signal faults and failures, resulting in better and more reliable journey times, improved safety, and a better user experience. The programme also incorporates improved detection technology and ground-breaking artificial intelligence and control techniques to improve the experience of people traveling by bus, bike or on foot.

The programme improves signal reliability, supports active travel (cycling and walking) and reduces energy consumption, which all aligns with the Combined Authority's priorities around boosting productivity, enabling inclusive growth, and tackling the climate emergency, as well as similar Mayoral pledges.

The programme also supports the West Yorkshire Transport Strategy 2040, Connectivity Infrastructure Plan and West Yorkshire Low Emissions Strategy 2016-2021.

Economic Case

Benefits of the programme include quicker journeys as a result of a reduction in traffic signal failures, lower repair and maintenance costs and lower energy consumption.

Improved facilities and fewer signal failures will encourage a shift to active travel (cycling and walking) and have health benefits as people become more active and less reliant on private cars, leading to reductions in greenhouse gas emissions.

The value for money (vfm) assessment has not yet been calculated but it has been estimated as being High reflecting a benefit cost ratio (BCR) of 2:1 or above.

Commercial Case

Several contractor frameworks are currently in place, through which similar programmes are already being delivered. A risk has been identified that contractors may not have sufficient capacity to deliver this programme. The use of existing frameworks mitigates this risk, making best use of the pre-existing relationship with contractors.

The existence of a five-year programme of CRSTS-funded works allows the West Yorkshire partners to discuss a large forward programme of work with contractors. This will provide contractors with more confidence to recruit and expand their operation if required.

Financial Case

The programme's funding is split between the five West Yorkshire partner councils based on the number of urban traffic control assets in each district.

The full five-year CRSTS allocation is £25,000,000. This strategic outline case supports Year 2 of this programme (2023/24), which has a total cost of £4,900,000, and Year 3 which has a total cost of £5,697,500.

The funding for quarter one of Year 2 (2023/24) has already been approved by the Combined Authority in February 2023. Approval is now being sort for the remaining funding for year 2, covering quarters two, three and four and totalling £3,966,250.

The promoter is required to submit an Approval to Proceed (ATP) to demonstrate compliance with the conditions set by the Combined Authority's Programme Appraisal Team (PAT) on 9 August 2023, in order for the £5,697,500 of development and delivery costs for year 3 of the programme (2024/25) to be approved. This will take the total programme approval for years 1 to 3 to £14,957,500. The ATP will be submitted later in the 2023/24 financial year.

All funding is provided from the Combined Authority's CRSTS funding settlement.

Management Case

This programme of work comprises a large number of smaller sub-schemes. These schemes will be delivered through partner councils' existing teams, which have experience of delivering similar schemes. Each partner council will have a project lead who will oversee delivery of their elements, with an overarching project manager to oversee delivery and manage the development of the strategic outline cases.

The five-year programme of works is being delivered between April 2022 and March 2027. An updated strategic outline case will be submitted at agreed points.

Progress will be reported to a new Urban Traffic Management Control (UTMC) operational board, which is expected to be in place by early 2024.