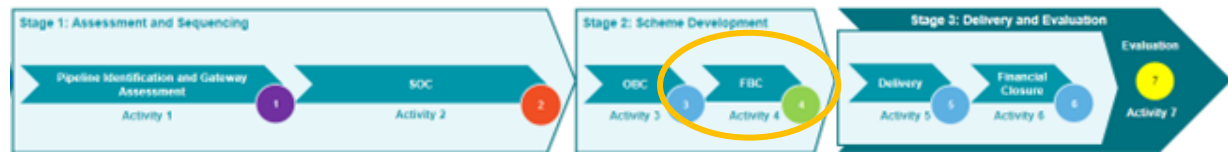


8Section A: Scheme Summary

Name of scheme:	Zero Emissions Bus Regional Area (Phase 1)
Lead organisation:	West Yorkshire
Applicable funding stream(s) – Grant or Loan:	Zero Emissions Bus Regional Area grant (from Department for Transport)
Growth Fund Priority Area (if applicable):	Priority 4: Infrastructure for growth
Approvals to date:	Decision Point 1 (Strategic Assessment) – September 2021 Decision Point 2 (Strategic Outline Case) – Full Zero Emission Bus Programme – to be presented to Combined Authority for approval on 23 June 2022
Forecasted completion date (decision point 5):	August 2022
Total scheme cost (£):	£56,161,738
Combined Authority funding (£):	£24,565,171
Total other public sector investment (£):	None
Total other private sector investment (£):	£31,596,567
Is this a standalone project?	No
Is this a programme?	Yes - part of the Zero Emission Bus (ZEB) Programme
Is this project part of an agreed programme?	Yes

Current Assurance Process Activity:



Scheme Description:

As part of regional commitments to delivering against the climate emergency, the Combined Authority has established an ambition to have a zero-emission bus fleet by 2036 and to have made significant progress towards this by 2030. ZEBRA is part of the West Yorkshire Zero Emission Bus (ZEB) programme to significantly increase the number of zero emission buses operating in West Yorkshire.

The West Yorkshire Zero Emission Bus Regional Area (ZEBRA) scheme is the first phase of three that will introduce electric zero emission buses and necessary charging infrastructure. This scheme will:

- Introduce 111 new electric buses to routes in Bradford, Leeds and Wakefield. This will bring the percentage of zero-emission buses in the fleet from 2% to 10%.
- Install electric vehicle charging infrastructure in the bus depots where the zero emission buses will be based.

In Bradford and Wakefield districts these will be the first of their type serving passengers in these areas. In Leeds, the zero emission buses will complement those already operating in the district.

Phase two will focus on Calderdale and Kirklees and will introduce around 8 electric buses onto tendered routes as part of a separate scheme. A final phase 3 project to the ZEB Programme is in the early stages of project planning.

Business Case Summary:

Strategic Case

The scheme supports the delivery of the Strategic Economic Framework (SEF) priorities:

- **Tackling the climate emergency:** growing our economy while cutting emissions and caring for our environment.
- **Delivering 21st century transport:** Creating efficient transport infrastructure to connect our communities, making it easier to get to work, do business and connect with each other.

It also supports the Mayor's pledge to tackle the climate emergency, and the West Yorkshire Climate and environment plan 2021 – 2046 which commits to decarbonising the bus network and the supporting infrastructure for buses.

This project will focus the new buses on routes with the lowest air quality. These routes run through areas that are experiencing the

	<p>highest levels of social and economic disadvantage, which are worsened by poor air quality.</p> <p>From March 2024, these buses will remove 50 tonnes of Nitrogen Oxides (NoX) a year and over 7,000 tonnes of carbon dioxide equivalent (CO2e) emissions from busy urban routes, including recognised Air Quality Management Areas (AQMA's)</p> <p>This scheme is an opportunity to improve the quality of public transport in the region by removing older, more polluting vehicles and providing modern, high-class vehicles connecting our key urban centres across the region.</p> <p>The scheme, as part of the West Yorkshire Zero Emission Bus (ZEB) programme, will reduce emissions from the region's bus fleet, contributing to the regional target to be net-zero carbon by 2038. The scheme supports the delivery of the West Yorkshire Transport Strategy 2040 and the Bus Service Improvement Plan by helping to deliver a comprehensive electric vehicle charging network, working with bus operators to move to a near-to-zero emissions bus fleet, and supporting improvements in bus fleets to attract new customers.</p>
Commercial Case	<p>The scheme has been developed in partnership with partner councils and bus operators through the West Yorkshire Bus Alliance. First, Arriva and Transdev (all partners in the scheme) will be responsible for delivering the vehicles and charging infrastructure. All three have independently engaged with manufacturers in relation to vehicle, infrastructure and civil engineering work and have provided letters of support for the project.</p>
Economic Case	<p>The benefit cost ratio for the scheme is 1.3 calculated using the Department for Transport's Greener Bus Model (GBM). However, when adjusted to consider the pollution saved by replacing a diesel bus that would operate at much lower speeds as is the case on the urban routes in West Yorkshire, this lifts the benefit cost ratio to 1.5 and medium value for money.</p> <p>The scheme will provide investment in buses that improve the customer offer, targeting deprived areas, promoting the levelling up agenda, and support modal shift away from car ownership travel through the introduction of newer, cleaner buses.</p>
Financial Case	<p>The total scheme cost is £56,161,738. Of this total, £24,565,171 will be funded by the Combined Authority using funding secured from Department for Transport through the ZEBRA grant. The remaining £31,596,567 will be funded by the private sector bus operators partnering with the Combined Authority on this programme.</p> <p>Key project risks are rising inflation costs and potential supply chain challenges with vehicles and infrastructure. These will be mitigated</p>

	by close monitoring and dialogue between the Combined Authority and bus operators' project teams and contingency funding built into the scheme costs.
Management Case	The scheme will be overseen by the Combined Authority, who will manage the funding and deliver the scheme through the Assurance Framework. All procured ZEBs and infrastructure will become the property of the respective bus operators who be responsible for ongoing maintenance. The project will be transferred from the Combined Authority Policy Team to the Delivery Team with oversight from Transport Services. A project manager and programme board will be established.