

# Zero Emission Bus Regional Areas (ZEBRA) 2

## Application Form

Applications to the Fund will be assessed against the criteria set out here and in the guidance document.

## Section 1 Applicant information

**This section is not scored.**

Bidding authority – Surrey County Council

Name and position of the official with overall responsibility for delivering the proposed bid.

Bid Manager – Valarie Sexton

Position – Bus Service Planning Team Manager

Email address – [passenger.transport@surreycc.gov.uk](mailto:passenger.transport@surreycc.gov.uk)

Postal address

Bus Service Planning Team Manager,

Surrey County Council

Third Floor, Quadrant Court

Woking

GU22 7QQ

[Web address for published application](#)

## Section 2 Key requirements

LTAAs will need to meet a number of key requirements to be able to receive funding. This section is not scored.

The Department reserves the right to reject any application which does not meet all these key requirements.

Please select Yes or No.

**2.1** Can you confirm you have an Enhanced Partnership in place or are following the statutory process to decide whether to implement a franchising scheme?

Yes

2.2 Can you confirm that all vehicles will meet the enhanced accessibility standards set out in the scheme guidance?

Yes

2.3 Can you confirm that you have letters of support from the bus operator(s) as per the below?

- LTAs must provide letters of support from the bus operator(s) who will be operating the zero emission buses, with signatures from the national CEO and local area MD, committing to investing in the buses and operating them in the area for a minimum of 5 years. The national CEO or equivalent should be empowered to commit the bus operator to operating the buses and providing any required funding for the proposed scheme. LTAs do not need to provide letters of support for all operators in the area, only the operators who will be operating the zero emission buses.
- If LTAs intend to award a contract to operate the bus service where the zero emission buses will be used, they must provide evidence that bus operators will submit bids to operate the bus service. This should take the form of letters from bus operators expressing

Yes

2.4 Please name the annex(es) which provide letters of support from the bus operator(s).

Annex 2a\_White Bus Letter of Support  
Annex 2b\_Falcon Coaches Letter of Support

2.5 Can you confirm that all ZEB Funding monies administered will take account of subsidy control obligations, this applies to any onward award of ZEBRA monies to third party organisations. Can you confirm that you have received legal advice?

Yes

2.6 In the case of proposals seeking funding for their battery electric proposals, can you confirm the proposal achieves a minimum low value for money using the Department's updated Greener Bus Tool?

**If this has not been met the Department reserves the right to not assess the rest of the application.**

Yes

2.7 In the case of proposal for hydrogen fuel cell buses should provide evidence of costs of hydrogen fuel. In line with other funding for hydrogen transport, proposals for hydrogen fuel cell buses will need to demonstrate that by March 2025 the buses will use hydrogen sourced with either Renewable Transport Fuels Obligation (RTFO) support or hydrogen that meets the UK's draft Low Carbon Hydrogen Standard (LCHS).

N/A

## Section 3 – Rural eligibility

- 3.1** If you are seeking to apply for the funding that has been initially earmarked for ZEBs in rural areas you will need to demonstrate how you meet the rural definition of ZEBRA 2. Introduce ZEBs in a rural area explain in **no more than 300 words** how the area meets the definition of rural area set out in the guidance. LTAs not seeking to apply for this funding to not need to complete this section.

**This section is not scored and will be pass/fail.**

N/A

## Section 4 – Bid description

- 4.1** Please complete the following fields with key information about your bid. This information should match the information that is included in the Greener Bus Tool. We suggest that section 6 is completed at the end of completing your application to ensure numbers reflect the final figures. **This section is not scored.**

Total grant amount – £3,237,828  
Local transport authority funding – £1,208,571  
Other public sector funding – N/A  
Bus operator funding – £4,458,103  
Other private funding – N/A  
Vehicle grant amount – £2,244,489  
Infrastructure grant amount – £993,339  
Total number of buses – 19  
Total capital cost – £8,904,502  
Vehicle capital cost – £7,580,050  
Infrastructure capital cost – £1,324,452

- 4.2** In **no more than 750 words** applicants should provide information on the project area. This should include a list of the bus routes where the ZEBs will operate and set out the location of the bus depot and/or other locations where supporting infrastructure will be located. **This section is not scored.**

Surrey County Council are bidding with two SME operators, covering 3 commercially provided local bus routes in the county.

Falcon Coaches routes are:

436 – Woking, Sheerwater, West Byfleet, Byfleet, Brooklands, Weybridge Station and Weybridge Town Centre  
461 – Chertsey, St. Peters Hospital, Ottershaw, Addlestone, Weybridge, Walton, West Molesey, Hampton Court and Kingston

CE Jeatt (trading as White Bus) routes are:

446 - Hatton Cross, Heathrow (T4), Ashford Hospital, Staines, Penton Park, Chertsey, St Peter's Hospital, Ottershaw and Woking

Falcon Coaches' depot is in Byfleet, Surrey. This is their only location being proposed to upgrade as part of ZEBRA2. The site will be upgraded to support the concurrent charging of 10 x 10.8m vehicles.

White Bus' depot is in Horsell, Surrey. This is their only location being proposed to upgrade as part of ZEBRA2. The site will be upgraded to support the concurrent charging of 22 x 10.8m vehicles. This will ensure the ability of the operator to grow their ZEB fleet over time.

The three routes being included in the bid are all operated commercially, with all three routes having been or will soon be enhanced.

White Bus 446 was enhanced in December 2023 with financial support from Ashford & St. Peters Hospital Trust and extended to operate to Ashford Hospital, Heathrow Airport and Hatton Cross. Falcon Buses service 461 is being enhanced to operate every 20 minutes and service 436 will have enhancements to the length of the operational day and weekend enhancements. Both of these will be funded as part of Surreys BSIP+ funding providing improved travel opportunities to surrey residents.

## Section 5 – Assessment Criterion 1 – Strategic Case

**5.1** Applicants should set out in **no more than 1,000 words** how they meet the case for change part of the strategic case as set out in the guidance.

Surrey County Council is taking a serious role as a key player in transitioning to net zero by 2050, having declared a Climate Emergency in 2019. In an update to the Surrey Climate Change Strategy, that is part of the overarching Community Vision for 2023, we have announced what has been agreed and or delivered so far. This includes:

- Committed £32 million to ensure that within 10 years all buses in Surrey are ultra-low or zero emission vehicles

Full detail on the wider Surrey's Greener Future strategy can be found on our website. In Surrey over 40% of total emissions come from transport. The County Council has taken a proactive approach with bus operators to start a process of decarbonising public transport.

This started in 2016 with an OLEV bid in partnership with Stagecoach South to electrify the Guildford Park & Ride services. This work has continued in 2023 with Metrobus, another of our larger operators, to purchase 34 Hydrogen Fuel Cell (HFC) buses. These buses will operate under a lease agreement alongside the 20 HFC buses purchased directly by Metrobus.

As part of the joint West Sussex CC ZEBRA2 bid, we are supporting the further decarbonisation with Metrobus by providing a contribution to matched funding more Hydrogen Fuel Cell buses.

Similarly, SCC started operating 5 Digital Demand Responsive Transport services in September 2023, ordering a total of 25 zero emission mini-buses for use on these services. There are further plans to expand DDRT across more areas in Surrey during Spring 2024 and these will operate with zero emission vehicles.

SCC sees ZEBRA2 as an important tool in supporting our wider transport decarbonisation plans by ensuring that funding available at a local level can go further and purchase more zero emission vehicles than would otherwise be unaffordable.

Prior to the announcement of ZEBRA2, officers had engaged with every bus operator in Surrey to understand the opportunities and limitations to electrifying their fleet. This has led to narrowing our focus to working with the two SME operators participating in this bid who are in the best position to deliver ZEBs in the next financial year.

Surrey has a history of proactive engagement and good working relationships with our bus operators which has now been further strengthened through the creation of the Enhanced

Partnership. This has led to the successful delivery of multiple projects in partnership. Including a number of network wide reviews over the last 10 years (including the recent Future Bus Network review), enhancing services using BSIP+ funding and introducing a young person discounted fare scheme (Surrey LINK card).

Decarbonisation is one aspect set out in our Surrey BSIP and sits alongside other initiatives to improve the bus service offer for the public. As such, we are also investing £9m in bus priority measures over the next 2 years that will support the investment in zero emission vehicles. There is a further investment of £1.4m to expand our Real Time Passenger Information network to help passengers as they travel.

The operators participating in this ZEBRA2 bid are Flacon Coaches and CE Jeatt (T/A White Bus).

White Bus is part of the Rowgate Group which also includes Fernhill Travel and Baileys Coaches. The group has a combined fleet of around 90 vehicles of which there is an operational bus fleet of 30 buses. 25 of these buses operate in Surrey.

The whole of the current bus fleet is to Euro 6 emissions standards and a very strong record of vehicle investment such that 6 of the fleet were purchased in 2021, 3 in 2022 and 9 in 2023.

The new ZEB's would continue that investment and the vehicles would replace older vehicles in the fleet.

Falcon Coaches operate 44 buses, all of which are in Surrey and all of the fleet is to Euro 6 emissions standards. They have a very strong record of investment with 12 new vehicles purchased in 2023, 4 in 2022 and 5 in 2021.

The new ZEB's would partially replace older vehicles and be used as the additional vehicle requirement for frequency enhancements as part of the BSIP+ funding.

The routes included in the bid are all commercial and being enhanced to improve the service offer for passengers. This is being funded by a combination of BSIP+ and NHS Trust funding.

There is a firm intention from White Bus to expand their ZEB fleet over future financial years, likely with additional funding support from the County Council, so that the infrastructure being delivered through ZEBRA2 will be fully utilised without the requirement for additional Governmental funding beyond what is being asked for in this bid.

Through the work with all the operators, the use of Hydrogen Fuel Cell vehicles would not be appropriate for the depots or the routes covered in the bid. Therefore, battery electric vehicles are the preferred option.

Due to space constraints and route requirements, 10.8m single deck ZEBs have been prioritised for this bid. These will be plug-in charged at the depots before going into daily service. There is also the option for increasing the number of ZEBs above the maximum charging spaces by charging vehicles at different times of day and night. This is being explored with the operators as the delivery of this project progresses.

Surrey County Council are investing significantly in public transport across capital and revenue activities. As mentioned, we are supporting West Sussex with their bid with Metrobus to increase numbers of HFC vehicles operating across the south east. We are investing locally in bus priority and RTPI to support bus operators with reliability and improve passenger confidence in public transport. We have expanded our Digital Demand Responsive Transport scheme offer and are assessing options to increase the number of schemes again next year. All of which will be supported with the purchase and lease of electric mini-buses, funded by the county council.

The Surrey Enhanced Partnership is delivering against our BSIP and a successful ZEBRA2 bid will further boost that delivery for passengers.

**5.2** Applicants should set out in **no more than 500 words** how the proposal meets the community benefit with regard to employment and training criteria set out in the guidance.

For the full delivery of the scheme there will need to be training for existing and new staff at the bus operators.

Training will be on:

- Maintenance and use of the charging infrastructure
- Maintenance of the new ZEBs
- Driver training on the new ZEBs

Onboarding new staff is focused on driver recruitment to ensure full delivery of each operator's commercial and tendered network. Including the enhancements to services funded by BSIP Phase 2 and third parties (Ashford and St Peter's NHS Trust).

Whilst the routes included in the bid are commercial, the operators also provide tendered services under contract with the County Council. As such, there is a requirement to deliver Social Value. This can include, for example, a focus on local hiring and offering training opportunities for apprentices and young people.

As part of both operators' applications to be on the County Council's Dynamic Purchasing System in 2017, operators committed to an ongoing process of upgrading their fleet, including fitting CCTV and GPS, and fleet replacement with newer, lower emission vehicles. Also to, wherever possible, to recruit locally and use local suppliers to help make their businesses sustainable in the long term.

As a result of operating electric vehicles and the service enhancements being proposed, White Bus will be upskilling three engineers, recruiting one additional engineering position plus employing eight additional drivers. Falcon will equally be upskilling their engineering department and employing an additional seven drivers.

**5.3** Applicants should set out in **no more than 500 words** how the proposal meets the community benefit with regard to the supply chain criteria set out in the guidance.

Due to the size of the operators and nature of the scheme, there is a more limited ability to influence the supply chain.

The preferred infrastructure supply will likely be using local subcontractors to undertake the works.

As part of both operators' applications to be on the County Council's Dynamic Purchasing System in 2017, operators committed to an ongoing process of upgrading their fleet, including fitting CCTV and GPS, and fleet replacement with newer, lower emission vehicles. Also to, wherever possible, to recruit locally and use local suppliers to help make their businesses sustainable in the long term.

**5.4** Applicants should set out in **no more than 500 words** how the proposal meets the wider decarbonisation benefits criteria set out in the guidance.

Surrey was one of the first authorities to look at decarbonisation of public transport and was successful in obtaining funding as part of the OLEV Bus bid in 2016.

Through this bidding process, Surrey County Council, in partnership with Stagecoach South, electrified the Guildford Park & Ride services by operating 9 new fully electric battery-powered vehicles.

In November 2020, the Surrey County Council Cabinet agreed capital funding to support the decarbonisation of the public transport sector. This allows officers, under delegated authority, the flexibility to respond to opportunities with operators, across scheduled bus services and DRT, to invest in zero emission vehicles.

We have already used some of this funding, in partnership with Brighton and Hove Buses trading as Metrobus, to purchase 34 Hydrogen Fuel Cell (HFC) buses. These operate under a lease agreement alongside the 20 HFC buses purchased by Metrobus.

As part of the joint ZEBRA2 bid, where West Sussex CC is the lead authority, we are supporting the further decarbonisation with Metrobus by providing a contribution for matched funding for more Hydrogen Fuel Cell buses that will operate on cross border services.

The full list of bus routes included in that joint bid are as follows, with the number of buses on each shown in brackets:

21: Dorking – Crawley (2)

22: Crawley – Guildford (2)

61: Horsham – North Heath and 93: Dorking – Beare Green – Kingsfold – Warnham – Horsham (4 across routes 61 and 93)

281: Lingfield – Dormansland – Crawley Down – Copthorne – Crawley (4)

291: Crawley – Copthorne – East Grinstead – Colemans Hatch – Withyham – Groombridge – Tunbridge Wells (4)

400: Caterham – Godstone – Bletchingly – East Grinstead (5)

Similarly, SCC has ordered or in the process of ordering a total of 25 zero emission mini-buses for use on new Digital Demand Responsive Transport schemes. There are further plans to expand DDRT across more areas in Surrey that will operate with zero emission vehicles.

The County Council sees ZEBRA2 as an important tool in supporting our wider transport decarbonisation plans by ensuring that funding available at a local level can go further and purchase more zero emission vehicles than would otherwise be affordable.

As mentioned in the Strategic Case, Surrey County Council is looking at carbon reduction opportunities across all its assets. This includes all our estate and is looking at a broad programme of work to reduce emissions from the building operations but also in how people travel to our sites. This includes a roll out of EV charging for staff and visitors to use as well as partnership charging arrangements with DRT operators.

This all forms part of the wider Surrey County Council Greener Futures Programme with the ambition to be carbon neutral by 2050. More information on the programme is covered in the [Strategic Case with the programme website](#)

- 5.5** LTAs must comply with the public sector equality duty (PSED – Section 149 Equality Act 2010). PSED consideration helps to ensure that people who share characteristics defined as “protected” by the Act will benefit from the scheme. The PSED also requires authorities to identify any likely negative impacts and to actively seek to remove or reduce these as far as possible.

We expect LTAs to consult with relevant stakeholders who represent people from the protected characteristic groups. Guidance on the PSED is available from the Local Government Association.

LTAs should set out in **no more than 1,000 words** how their proposal will meet the expectations of the Equality Act.

## Equalities Impact Assessment Summary

As part of developing the ZEBRA2 proposals an Equalities Impact Assessment was completed.

Below is a summary of the EqlA.

Who is affected by the proposals?

Any users or potential user of the bus routes where investment in zero emission vehicles is proposed. Also, people in areas where air quality is poor and support reducing emissions from transport by decarbonising elements of the local bus network.

This covers both the bids proposed to support zero emission buses for use in Surrey, i.e. the Surrey County Council bid and West Sussex County Council bid, supported by Surrey County Council.

How does the service proposals support the outcomes in the Community Vision for Surrey 2030?

Investment in zero emission buses supports:

- Children and young people are safe and feel safe and confident.
- Everyone benefits from education, skills and employment opportunities that help them succeed in life.
- Residents live in clean, safe and green communities, where people and organisations embrace their environmental responsibilities.
- Journeys across the county are easier, more predictable and safer.
- Well-connected communities, with effective infrastructure, that grow sustainably.

Evidence held to assess the proposals:

We hold data on the number of trips made on each service.

Route Total number of single trips 2022/23

Across the commercial services covered in this bid, they carried over 1.25m single trips in the last financial year.

We also hold data on the number of concessionary pass holders under the English National Concessionary Travel Scheme (ENCTS). However, we cannot separate which what type of concessionary pass is used on a bus. This is because the use is recorded as a concessionary pass rather than an older person's or disabled person's pass being used.

Below is the table of current numbers of ENCTS pass holders

Type Pass Holders

Disabled +C (Companion pass) 2,337

Senior +C (Companion pass) 470

Senior 150,721

Disabled 4,529

Total 158,057

We have input from various public consultations and views from the Stakeholder Reference Group on priorities for the Enhanced Partnership, which is the legal partnership between the County Council and bus operators.

Suggested improvement from consultation and stakeholders have not focused on new buses or zero emission buses as a top priority. Rather, these have been around cheaper fares, improving frequencies and reliability.



However, with decarbonisation a priority for the County Council and new vehicles offering a better passenger experience, it is felt that bidding for DfT funding to invest in zero emission vehicles is something that would benefit bus users and residents.

Below gives the number of single trips made in 2022/23 using concessionary bus passes on each of the routes proposed for investment.

Route Total number of single trips 2022/23

Across all the routes covered in the bid, they carried a total of around 300,000 single concessionary trips in the last financial year.

Impacts identified:

Through the EqIA process Positive Impacts were identified across all protected groups linked to expanding the numbers of zero emission vehicles.

New fully electric vehicles will fully comply with the new Passenger Information Regulations that come into force from October 2024. This provides improved accessibility to information for passengers.

New buses provide a better passenger experience by being less noisy than diesel buses and reduce emissions from the transport sector.

Positive impacts will be felt by people from all protected groups but will be especially felt by disabled passengers.

Modern electric vehicles are quieter. This may benefit passengers where noisy environments may cause them issues. People with autism, for example, may be deterred from using buses because of engine noise or the vibrations.

Having Audio Visual information will support all passengers when they are travelling but is of particular importance to people with sight or hearing loss or both, and people with learning difficulties.

Removing emissions from transport along these routes, particularly in areas like Spelthorne, Woking (Guildford Road), Addlestone, Weybridge High Street and Walton High Street where there are issues with air quality, will support a wider push to net zero and help with reducing instances of respiratory illnesses associated with air quality.

- 5.6** LTAs seeking funding for a hydrogen fuel cell bus proposal that is poor VfM will need to demonstrate their proposal is innovative to receive funding. LTAs should set out in **no more than 1,000 words** how their proposals for hydrogen fuel cell buses will provide learning to the Department and wider government that will not be obtained from existing hydrogen fuel cell bus projects.

Proposals for hydrogen fuel cell buses that are a minimum of low VfM do not need to complete this section.

N/A

## Section 6 – Assessment Criterion 2 – Value for Money

Section 6 of the application form and Greener Bus Tool will be used to assess Value for Money. This represents the 'Economic case' of the Five Case Model.

The central BCR is 1.23. Whilst low, this is supported by a separate BCR for the delivery of 16 additional ZEBs for White Bus building up to the full charging capacity funded through ZEBRA2. This is predicated on the joint investment between White Bus and Surrey County Council to purchase 16 more ZEBs in future financial years. The full take up of 22 ZEBs could not be delivered at this time and will potentially not be achievable

without the ZEBRA2 funding opportunity. With the infrastructure funding from ZEBRA2 in place, it opens up the opportunity to grow numbers of ZEBs with that costs being met in future years, in partnership between the operator and LTA.

The BCR specifically covering the build out of additional buses to reach full capacity is 1.67. This is shown in the "SCC plus 16 buses greener bus tool final figures.xls" spreadsheet submitted with this application.

**6.2** Please outline in **no more than 500 words** evidence informing assumptions related to:

- the estimated annual vehicle distance,
- the fuel/electricity consumption scenario chosen,
- annual infrastructure maintenance costs (if an annual maintenance cost is stated in the tool),
- electricity/hydrogen costs if local evidence is used
- battery replacement costs (if the suggested values in the GBT guidance are not used) and
- a quantified risk assessment (if conducted).

If the evidence is not in a suitable format, please summarise it here and signpost where supplementary evidence has been provided i.e. in a spreadsheet or e-mail as an annex. Further detail is available in the GBT guidance on the level of detail required for input assumptions.

The evidence base supporting this bid is built up using data on the routes proposed in the bid, quotations from bus manufacturers, infrastructure providers, including input from the DNO, and advice from consultants commissioned to support the bid.

Detail on the numbers of vehicles to decarbonise routes and the kilometrage of those routes, comes from the bus operators participating in ZEBRA2.

Infrastructure maintenance costs are included in the quotes from the DNOs, provided as Annexes 3a – 3d.

There are no costs included in the ZEBRA2 bid associated with battery replacement. The bus operators will be responsible for the maintenance of the buses and battery replacement as part of their arrangements with the preferred manufacturer/s.

A quantified risk assessment was undertaken by consultants commissioned to support the ZEBRA2 bid. This assessment set out the percentage risk associated with the timing of the bid and the impact of inflationary pressure that may change the cost of the scheme delivery between now, the March funding announcement and timing until scheme completion. This is set out in more detail in the Greener Bus Tool.

As a result of the QRA being undertaken, it is believed the risk associated with the project is low. This is on the basis that the required quotes and necessary matched funding are in place to deliver the scheme. As the scheme progresses, once the bid is submitted, work will continue with the operators to finalise the Grant Funding Agreement under which the grant will be awarded and buses will operate. A full subsidy control assessment is being prepared and once the funding announcement is made this will be finalised and published on the .gov transparency database for a period of 1 month prior to the orders being placed. This will allow any interested parties the opportunity to discuss this award. Once this step has been completed, with our legal support, we will be ready to sign the grant funding agreement so that orders can be place with manufacturers and infrastructure providers.

**6.3** Discussion of any significant impacts of the scheme which have not been estimated by the tool (non-monetised impacts) should be outlined in **no more than 500 words**. If any significant non-monetised benefits have been identified, the scale of the change needed to reach a higher VfM category should be determined, by calculating the required % increase and absolute increase in present value benefits (PVB).

The main impact identified is the future delivery of an additional 16 ZEBs to be operated by White Bus. This will bring their fleet up to a total of 22.

This increases the central BCR for the scheme as a whole from 1.23 for 19 buses to 1.67 for 35 buses.

The cost of the additional ZEBs is not included as part of this bid and will be met in partnership between the LTA and the operator through further investment in future years.

This bid does include funding the full delivery of the infrastructure required to facilitate the charging of 22 electric buses to be an enabler for this expansion planned across future financial years.

Wider non-monetised benefits include:

- Carbon and NOX emissions reduction
- Reduction in particulates

There are 28 AQMAs in Surrey. These buses will serve 5 of those areas. Removing emission from transport along these routes, particularly in areas like Spelthorne, Woking (Guildford Road), Addlestone, Weybridge High Street and Walton High Street where there are issues with air quality, will support a wider push to net zero and help with reducing instances of respiratory illnesses associated with air quality.

- Reduced maintenance liability for ZEBs compared to diesel buses, creating efficiencies for operators
- Reduced road noise for residents
- Re/upskilling staff to maintenance and drive new ZEBs
- Improved look and ride experience for passengers, improving satisfaction and encouraging more potential passengers onto the services
- Reduced maintenance cost for the Council as the Highway Authority because of reduced road wear

**6.4** Discussion of any significant risks and uncertainties that might influence a scheme's VfM, with appropriate sensitivity tests to show the impact risks/uncertainties would have on the scheme BCR should be outlined in **no more than 500 words**. Completed GBTs with sensitivity tests should also be provided, with the file name clearly indicating which sensitivity test has been conducted. Refer to the GBT guidance for a suggested list of sensitivities.

Due to the preliminary effort on behalf of the operators and County Council, the risk and level of uncertainty associated with this scheme is believed to be low.

Having agreed quotes with infrastructure providers, including a commitment from one provider to hold their price for 6 months, there is little risk that inflationary pressure will affect the prices of the works and therefore impact the BCR.

Also, the whole project covered in the bid is due to be completed in the 2024/25 financial year. Orders with the preferred supply can be placed immediately, following the Subsidy Control 1 month publication period has expired, after the funding announcement and a commitment from the manufacturer for a 9 month delivery timescale.

There is no uncertainty regarding the financing of the project with the bus operators and County Council having the financing and budget in place and agreed to be allocated once the funding announcement is made.

There are no political approvals required to release the SCC funding.

We are confident that the Grant Funding Agreement (currently drafted outline Heads of Terms) can be fully developed ready to be signed once the funding announcement is made.

Legal advice on Subsidy Control did not highlight any issues that would cause issue with the project progressing but did provide advice for the County Council to explore following the submission of this application. More information on this is summarised in section 8.1.3.

## Section 7 – Assessment Criterion 3 – Grant funding per bus

The grant funding per bus criterion will form part of the financial case of the Five Case Model. LTAs must complete the grant funding per bus calculator spreadsheet which will be used to calculate a grant funding per bus score.

## Section 8 – Assessment Criterion 4 – Deliverability

The Deliverability criterion draws together relevant aspects of the Finance, Commercial and Management Cases in the Five Case Model.

### 8.1 Finance Case

Together with grant funding per bus section 8.1 of deliverability will form the finance case of the Five Case Model.

**8.1.1** LTAs should set out clearly in **no more than 1,000 words** all the sources of funding for their proposal, which should match the information included in the Greener Bus Tool. For all funding sources, except grant funding from the Government, LTAs should set out a short summary detailing the source of the funding and what approvals (e.g. investment or credit committees) are required to access the funding.

The funding basis for this bid is straight forward. This is summarised below:

Falcon Coaches Bus Funding - £2,834,000

Zebra Bus Funding - £1,529,028

SCC Bus Funding - £823,323

Total Bus Funding - £5,186,350

Falcon Coaches Infrastructure Funding - £150,563

Zebra Infrastructure Funding - £451,689

Total Infrastructure Funding - £602,252.00

Total Falcon Coaches Cost - £5,788,602

Total Number of ZEBs - 13

White Bus Bus Funding - £1,284,000

Zebra Bus Funding - £721,305

SCC Bus Funding - £388,395

Total Bus Funding - £2,393,700

White Bus Infrastructure Funding - £180,550

Zebra Infrastructure Funding - £541,650

Total Infrastructure Funding - £722,200.00

Total White Bus Cost - £3,115,900

Total Number of ZEBs - 6 (with plans to expand to 22 in future financial years)

LTA funding for decarbonisation was agreed by Surrey County Council's Cabinet in November 2020 and gave delegated authority to officers to use in partnership with scheduled bus operators and the DRT sector. This was to ensure the timely and effect spend, by identifying opportunities with operators to deliver schemes directly as well as using as matched funding so that the SCC budget can go further and deliver more schemes than if funding solely by the County Council.

As such, the delegated authority, means there are no political approvals processes required ahead of submitting this bid, during the bid assessment or once the funding announcement is made. Therefore, as soon as the funding announcement is made, SCC are in a position to immediately progress with the grant funding process and the operators can place orders with the infrastructure provider and preferred bus manufacturer.

The participating bus operators have confirmed their financial backing for this bid in their letters of support, Annexes 2a and 2b.

The County Council is undertaking a financial assessment of the participating bus operators to ensure they are sufficiently financially stable to back this project alongside their other commitments. Both Falcon Coaches and White Bus also provide a significant number of tendered services for the County Council. Operating a combined 39 routes with an annual contract value of c£4m for 2023/24.

By having a straight forward funding approach and having necessary approvals already in place, we see this as a strong bid.

To ensure the financial position is strong, the County Council is asking for a lower grant funding amount of 65% from the Department and using a higher proportion of our own capital to help ensure the deliverability of the two schemes covered by this bid. This is reflected in our Greener Bus Tool submitted with this application form.

The costs provided 8.2.2.1 for the equivalent diesel buses is an average of the costs provided by ADL for both operators. This is reflected in the quotes provided and does not impact the overall scheme cost.

**8.1.2** LTAs seeking to use finance other than from a bus operator(s) (e.g. private, UKIB, other) should set out in **no more than 1,000 words** the finance, what further steps would be needed to secure that finance on confirmation of any grant award from the scheme, and what other alternative sources would it seek to utilise if the external finance was subsequently not available.

Other than private sector funding from the participating bus operators, Surrey County Council are not proposing to use of any other private finance sources to support our ZEBRA2 bid.

It has been agreed between SCC and the bus operators that the bus operators would contribute the cost of the diesel buses, ZEBRA 2 funding would contribute 65% of the difference between the diesel bus and the ZEB and SCC would contribution the remaining 35%. We are not asking for the maximum 75% of the cost difference for the vehicles. The infrastructure costs would be covered by 75% from ZEBRA 2 funding and the remaining 25% from the bus operators.

### **8.1.3 Subsidy control**

LTAs should set out in **no more than 1,000 words** a summary of the legal advice that they have received on how they will comply with subsidy control rules. LTAs must attach the full legal advice as a labelled annex.

Subsidy Control compliance has been assessed by specialist lawyers DWF who have advised that the funding may be lawfully awarded under the Subsidy Control Act 2022. Our advice is attached and suggests how the Subsidy Control Principles set out at Schedule 1 of the Subsidy Control Act 2022 may be applied.

## **8.2 Commercial Case**

Section 8.2 of the deliverability criterion will form the Commercial Case of the Five Case Model.

**8.2.1** LTAs should set out in **no more than 1,000 words** how they will comply with the requirements on procurement set out in the guidance.

It has been agreed between SCC and the bus operators that the bus operators would contribute the cost of the diesel buses, ZEBRA 2 funding would contribute 65% of the difference between the diesel bus and the ZEB and SCC would contribution the remaining 35%. We are not asking for the maximum 75% of the cost difference for the vehicles. The infrastructure costs would be covered by 75% from ZEBRA 2 funding and the remaining 25% from the bus operators.

It has also been agreed that the bus operators will be the procuring bodies with their preferred bus manufacturer and infrastructure delivery supplier. In this way, the purchasing process is more streamlined but with the Council's commitment and Department grant protected under legal agreement.

The bus operators have been engaging with the manufacturers to get information on what model may best fit their requirements. As part of this process operators are taking into account factors that may impact their decision on a preferred manufacturer. For example, the make up of their current fleet and maintenance contracts and if there are any synergies with ZEB purchasing. The bus operators will commission, own manage and maintain all the connections and other associated on-site charging infrastructure at their depots. They will have the necessary maintenance contracts in place to ensure the proper working of the charging infrastructure. Similarly, bus operators, as part of the purchase of ZEBs, will have the necessary maintenance and battery replacement contracts in place.

This procurement process, led by the bus operators, has been conducted in a fair, open, non-discriminatory way to ensure there is no competitive advantage or disadvantage given to any of the manufacturers or infrastructure providers who submitted quotes.

In this way, having the bus operators lead on procurement, rather than the County Council, the timescales for placing orders is more streamlined and delivery timescales will be shorter (subject to no manufacturing issues). Following this approach there is a significant likelihood that the new ZEBs will be delivered and in service in the 2024/25 financial year.

The County Council have sought legal advice and will comply with relevant Subsidy Control requirements, including submitting a subsidy control assessment and uploading this onto the Government's Transparency Database.

The bus operators will retain ownership of the vehicles and commit to operating them in Surrey for a period of no less than 10 years. The County Council will contribute matched funding as part of the bid but will not retain ownership of the assets, with a legal agreement to be put in place to protect the Council's commitment.

To ensure this approach complies with relevant legislation, the County Council commissioned external legal advice. This is covered in detail in Annex 4.

The information given in section 8.2.2.1 in this application form cover costs provided to Falcon Coaches. The information for White Bus is included in ZEBRA2-Application-Form-Multiple-Operator-SCC.pdf submitted with this application form.

## **8.2.2 Evidence of costs**

LTAs should provide evidence that they, or one of their partners, has engaged with the supply chain to demonstrate reliability of costs. The Department reserves the right to reject any application which has not provided all the required quotes.

**8.2.2.1 LTAs must provide quotes from two manufacturers** for the cost of zero emission buses. LTA must also provide quotes from the manufacturers for the cost of an equivalent diesel bus. Please attach quotes in the form of a letter or email from suppliers as a separate annex(es). The annex(es) should be clearly labelled. LTAs must input the key information on these vehicles into the below table.

	<b>Quote from preferred manufacturer</b>	<b>Quote from second manufacturer</b>
Manufacturers name	Ytong	ADL
Make and Model of bus	E10	Enviro200EV
Number of buses in bid	13	13
Vehicle technology (eg. Battery electric or hydrogen fuel cell)	Battery electric	Battery electric
Cost per bus (£)	£398,950	£408,000
Cost of diesel equivalent (£)	N/A	£218,000
Has evidence for the cost of this bus model been provided alongside the application form?	Yes	Yes
Link to ZEMO ZEB certificate*	<a href="https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view.yutong-e10-e12_4422.htm">https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view.yutong-e10-e12_4422.htm</a>	<a href="https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view.alexander-dennis-enviro200ev_4413.htm">https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view.alexander-dennis-enviro200ev_4413.htm</a>
Battery manufacturer	CATL	BYD
Battery Installed Capacity (kWh)	422	348
Battery Usable Capacity (kWh)	371	330
Maximum zero emission range for type of route	443km	301km
Plug type	DC CCS 2 (x2)	Type 2 & CCS2
Rated charging power (kW)	240	102
Charger compatibility (eg. AC, DC or both)	DC	AC or DC
Fuel cell manufacturer	N/A	N/A
(For hydrogen proposals) Hybridised battery size	N/A	N/A
(For hydrogen proposals) Fuel cell power rating (kW)		
Total system power rating		
Hydrogen Storage Capacity (kg)		
On board hydrogen Storage Pressure (bar)		
Vehicle length	10.8m	10.8m
Passenger capacity (seated)	37	34
Number of PSVAR compliant wheelchair spaces	1	1
Number of additional flexible spaces	1	1
Total passenger capacity	70	65



For bids with multiple operators a second, separate, table must be completed

	<b>Quote from preferred manufacturer</b>	<b>Quote from second manufacturer</b>
Manufacturers name	Ytong	ADL
Make and Model of bus	E10	Enviro200EV
Number of buses in bid	6	6
Vehicle technology (eg. Battery electric or hydrogen fuel cell)	Battery electric	Battery electric
Cost per bus (£)	£398,950	£408,000
Cost of diesel equivalent (£)	N/A	£218,000
Has evidence for the cost of this bus model been provided alongside the application form?	Yes	Yes
Link to ZEMO ZEB certificate*	<a href="https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view,yutong-e10-e12_4422.htm">https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view,yutong-e10-e12_4422.htm</a>	<a href="https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view,alexander-dennis-enviro200ev_4413.htm">https://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub/view,alexander-dennis-enviro200ev_4413.htm</a>
Battery manufacturer	CATL	BYD
Battery Installed Capacity (kWh)	422	348
Battery Usable Capacity (kWh)	371	330
Maximum zero emission range for type of route	443km	301km
Plug type	DC CCS 2 (x2)	Type 2 & CCS2
Rated charging power (kW)	240	102
Charger compatibility (eg. AC, DC or both)	DC	AC or DC
Fuel cell manufacturer	N/A	N/A
(For hydrogen proposals) Hybridised battery size	N/A	N/A
(For hydrogen proposals) Fuel cell power rating (kW)		
Total system power rating		
Hydrogen Storage Capacity (kg)		
On board hydrogen Storage Pressure (bar)		
Vehicle length	10.8m	10.8m
Passenger capacity (seated)	37	34
Number of PSVAR compliant wheelchair spaces	1	1
Number of additional flexible spaces	1	1
Total passenger capacity	70	65

\* The Zemo Partnership (formerly Low Carbon Vehicle Partnership) have developed the Zero Emission Bus definition and test process, and a certification of compliance is provided as each bus type is tested. Bidders can find these certificates on Zemo Partnership's website: [www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub](http://www.zemo.org.uk/work-with-us/buses-coaches/low-emission-buses/certificates-hub)

**8.2.2.2** For proposals to introduce battery electric buses LTAs **must provide quotes from two suppliers** of charging infrastructure. Please attach quotes in the form of a letter or email from suppliers as a separate annex(es). The annex(es) should be clearly labelled. LTAs must input key information on charging infrastructure in the below table.

Electric	Quote from preferred manufacturer	Quote from second manufacturer
Manufacturers name	Zenobe	VEV
Make and model name	Zerova (DS120)	Starcharge 120 kW
Number of charging units (charging unit with dual plug counts as one unit)	5	5
Cost per charging unit	£28,233	£25,990
Has evidence for the cost of this model been provided alongside the application form?	Yes	Yes
Max Charging rate (kW)	120	120
AC or DC charger	DC	DC
Chargepoint protocol utilised		

For bids with multiple operators a second, separate, table must be completed

Electric	Quote from preferred manufacturer	Quote from second manufacturer
Manufacturers name	Zenobe	VEV
Make and model name	Zerova (DS120)	Starcharge 120 kW
Number of charging units (charging unit with dual plug counts as one unit)	6	6
Cost per charging unit	£28,233	£25,990
Has evidence for the cost of this model been provided alongside the application form?	Yes	Yes
Max Charging rate (kW)	120	120
AC or DC charger	DC	DC
Chargepoint protocol utilised		

**8.2.2.3** For proposals to introduce hydrogen fuel cell buses LTAs **must provide quotes from two suppliers** of refuelling infrastructure. Please attach quotes in the form of a letter or email from suppliers as a separate annex(es). The annex(es) should be clearly labelled. LTAs must input key information on charging infrastructure in the below table.

N/A for this bid.

**8.2.2.4** In **no more than 750 words** LTAs should explain how the quotes they have obtained for vehicles and infrastructure have been informed by the vehicle and infrastructure specifications they intend to introduce.

The type of vehicle preferred by the operators participating in this bid has been determined by the requirements of the routes they operate and the space capacity at the depots for static charging.

These have been the two key determining factors when engaging with the infrastructure providers and bus manufacturers.

Whilst the bus operators have been the lead contact, they have been supported by an SCC Project Manager, who has been specifically employed to facilitate our public transport decarbonisation ambitions.

This partnership approach has meant that both the operators and the County Council have been involved with site visits with the infrastructure providers to assess the on-site and connection requirements. The County Council has been engaged throughout this process on what infrastructure requirements and limitations there are for each site.

Therefore, when looking at the depot capacity and routes covered, the operators have specified the buses be single deck, 10.8m vehicles. This is reflected in the quotes provided by the manufacturers.

This work has proven that, as will most likely be the case for future decarbonisation work, the depot space will be the limiting factor in moving towards a 100% electric or HFC public transport offer. However, as identified with the operators there is scope for a more dynamic approach to charging rather than static charging of vehicles overnight using. This can mean that more ZEBs could be operated out of a depot where there are numbers of static charging points. This approach will be further explored with operators.

Other considerations that have influenced the decisions on preferred suppliers are the ongoing maintenance arrangements and how they align with the operators current fleet management regimes, the arrangements for infrastructure maintenance, warranty length for vehicles and batteries.

**8.2.2.5** Please provide evidence of the cost of the grid connection. This should take the form of a connection offer, budget estimate, letter or email from the Distribution Network Operator or Independent Connection Provider. If a grid connection is not needed, please explain in **no more than 750 words** why.

DNOs have been engaged via the infrastructure providers to provide quotes covering grid connection, site upgrades and charging infrastructure installation.

Annexes 3a-3d cover the full quotes from the two infrastructure providers engaged, including DNO costs and detail.

**8.2.2.6** Proposals for battery electric buses that are not using the GBT costs for electricity should explain why and provide evidence of the cost of the electricity. Evidence should take the form of a letter or email from suppliers as a separate annex(es). This annex(es) should be clearly labelled.

N/A for this bid

**8.2.2.7** Proposals for hydrogen fuel cell buses should provide evidence of costs of hydrogen fuel. Proposals for hydrogen fuel cell buses must either be sourced with Renewable Transport Fuels Obligation (RTFO) support or hydrogen that meets the UK's draft low carbon hydrogen standard. Proposals for hydrogen fuel cell buses, must provide evidence of costs of hydrogen fuel. This evidence should take the form of a provisional offtake contract, budget estimate, letter, or email from a hydrogen fuel supplier. Please attach this as a separate annex(es). This annex(es) should be clearly labelled.

N/A for this bid

**8.2.2.8** LTAs that are proposing to use private finance to support their proposal they will need to provide a letter of support from the private financier. Please attach quotes in the form of a letter or email from suppliers as a separate annex(es). This annex(es) should be clearly labelled. LTAs will also need to set out in **no more than 1,000 words** what further steps would be needed to secure that finance on confirmation of any grant award scheme, and what other alternative sources would it seek to utilise if the external finance was subsequently not available.

Other than private sector funding from the participating bus operators, Surrey County Council are not proposing to use private finance to support our ZEBRA2 bid.

## **8.3 Management Case**

### **8.3.1 Governance**

In **no more than 1,000 words** please provide reassurance that they and their partners have the capacity to deliver the project as set out in the guidance.

Ownership:

Whilst this project is being delivered in partnership with the two bus operators participating in this bid, there is a clear separation of ownership of both the vehicles and associated infrastructure.

Because the depots are not Surrey County Council assets and, in order to comply with Subsidy Control requirements, the County Council is not providing any funding for the infrastructure upgrades required at the depots. These are being funded by the bus operators who own and manage the sites.

Similarly, the bus operators will own and maintain the vehicles. There will be a Grant Funding Agreement in place between the operators and the County Council that will protect the County Council's commitments.

Roles:

On behalf of the County Council there are three members of staff involved in the ZEBRA2 process.

These are the:

Bus Service Planning Team Manager. They have the overall role of managing the bus network and ensuring delivery of standards. They played a key partnership management role in the purchasing and leasing of the HFC buses rolled out on the Metrobus routes in the east of Surrey.

Bus Service Planning Project Manager. They have been specifically brought on to support the decarbonisation of public transport and has years of experience in bus operations, bus procurement, fleet maintenance and depot management having previously worked in a senior position at Stagecoach. They have been the main contact between the LTA, bus operators and the DNOs and will continue in this capacity going forward with the schemes.

Programme Manager, National Bus Strategy. They manage the Enhanced Partnership on behalf of the EP Board and fulfil the role of EP Officer alongside other activities. They are a qualified Project Manager and have managed a number of large scale, public transport focused, projects for the County Council. They will provide overarching project management support, workstream reporting for the schemes and be responsible for the monitoring and evaluation.

On behalf of the bus operators:

Both Managing Directors are leading on the bid and delivery process for the participating operators. They will be supported by relevant members of staff to ensure the connection and depot upgrade works are completed on time. Also, that drivers and maintenance staff are trained on the new vehicles before they go into service.

### 8.3.2 Allocating grant funding

LTAs should set out in **no more than 500 words** how they will allocate grant funding to their bus operator(s) partners. LTAs can attach draft funding agreements with bus operators as an annex.

Surrey County Council has experience in administering grant funding arrangements from recent and historic transport projects.

As mentioned previously, the County Council successfully delivered the OLEV programme, in partnership with Stagecoach, to electrify the Guildford Park and Ride services.

More recently, the County Council has successfully delivered the Mole Valley Connect service's initial launch, funded by the Rural Mobility Fund.

No competition is necessary to enter into GFAs with (White Bus/Falcon) as this is not deemed to be a public service contract and therefore it does not trigger the application of the Public Contracts Regulations 2015. Before submitting its application for Zebra funding, the Council called for expressions of interest to all bus operators in the region as detailed in Section 8.1.3 to which only (White Bus/Falcon) were in a position to progress with a decarbonisation scheme at this time.

The GFA will specify the following key aspects:

- Purpose and use of the grant
- Payment of grant including payment milestones – clearly aligned with the overall programme with milestones defined by asset (bus and infrastructure) proof of order and delivery
- Delivery obligations/outcomes
- Accounts, records, monitoring and reporting
- Default provisions and the withholding, suspending or repayment of grant
- Permitted use of the grant funded assets
- Protection of Council interests in the grant funded assets in the event of a major change in circumstances
- Limitation of liability and surviving obligations.

The County Council has commissioned legal advice to support the develop the Grant Funding Agreement (GFA) that will be further developed prior to the funding

announcement. The draft GFA is set out as Heads of Terms and are attached to this application form as Annex 5.

### 8.3.3 Project plan

LTAs should provide a project plan. This should be set out in **no more than 1,500 words**. A project plan in formats like gannt charts and tables, can also be provided as a separate annex(es). These must be provided in an excel format.

As per the Project Plan annexed to this application, the schemes in the bid have been split into the following workstreams.

#### 1. Bidding process and award:

This covers the bid application development and submission by 4.00pm on Friday 15 December up to when the funding announcements in made.

#### 2. Procurement:

The development and agreement of quotes from the bus manufacturers and infrastructure providers, including the engagement with the DNO and ongoing engagement necessary whilst waiting for the funding announcement.

The development of the Grant Funding Agreement (GFA), based on external legal advice, between the County Council and participating bus operators.

The development of the Subsidy Control Assessment form which will be finalised and published following the funding announcement

Signing of the GFA following the ZEBRA2 funding award announcement.

The commissioning of the preferred infrastructure provider and DNO works.

Placing bus orders with the preferred supplier.

#### 3. Infrastructure delivery:

Managing the groundworks for the electrical connections, site capacity upgrades, electric charging infrastructure installation, testing and sign off.

#### 4. Operational delivery:

Managing the staff training on the equipment on site and new vehicles. Including driver and mechanics training.

Ensuring that the site and staff are ready to receive and test the new vehicles.

Bringing the new ZEBs into service on the routes included in the bid.

#### 5. Monitoring and evaluation:

Using the agreed Monitoring and Evaluation Plan to assess the operational delivery and benefits realisation from the scheme.

#### Key dates

The dates provided are estimated because the award announced date from the basis by which all other activity cascades. Therefore, some dates are shown as “earliest start” or “earliest finish” and should not be considered as a confirmed date of when an activity will happen.

These are summarised below. A gannt chart showing the overall highlevel project plan has been submitted alongside with application form.

- ZEBRA2 award announcement – March 2024
- Grant Funding Award Letter / MoU signed by the LTA and returned to the DfT – end March 2024
- Subsidy Control Assessment published on the governments transparency database – end of April 2024 (1 month wait period required)
- Grant Funding Agreements signed by the LTA and operators –June 2024
- Bus operators place orders for buses – earliest start June 2024
- Bus operators place orders for infrastructure works – earliest start June 2024
- Site work finished across both sites – earliest finish December 2024. This is based on the quotes provided needing an estimated 29 week timescale for infrastructure works to be completed
- Buses delivered – earliest start March 2025. Based on a 9 month build and delivery timescale from the preferred supplier
- Buses in service – earliest start March/April 2025
- Monitoring and evaluation plan starts – earliest start March/April 2025
- Initial report to DfT – October 2025. Alongside BSIP Target reporting.

As mentioned in the Governance section, these activities will be managed by the SCC Project Manager and EP Officer in partnership with the participating bus operators.

Progress against the workstreams will be monitored and reported on monthly to the SCC project team by the EP Officer. These meetings will check on progress, risks and issues. With detail from the bus operators feeding into the workstream reports.

Copies of the workstream reporting slides have been submitted as an annex to this application.

Progress reports will also be provided to the relevant EP governance bodies. Including the EP Board and Stakeholder Reference Group so that all interest parties are aware of progress and the estimated key delivery dates.

As part of the monitoring and evaluation process, a Lessons Learned report will be produced. This will take the learning from delivery for ZEBRA2 for future decarbonisation schemes, particularly where working with other SME bus operators.

#### 8.3.4 Risk Management

LTAs should set out in **no more than 1,000 words** your top five risks and the actions they will take to mitigate these risks.

As part of the ZEBRA2 bidding process a Risk Register was completed. The below summarises the key risks identified through that process.

Risk 1: Cost increase on zero emission vehicles

Description: That the quotes from bus manufacturers do not hold their prices from the time of bidding to the time of placing the order.

Impact: That the cost of buses rises and can reduce the number of buses that can be purchased using the available ZEBRA 2 and matched funding.



Mitigation: Manufacturers are asked to hold prices until orders can be placed following the ZEBRA 2 award announcement in March 2024.

There is sufficient matched funding available to assure manufactures that orders can be placed soon after the ZEBRA 2 funding is awarded.

That DNO quotes have been obtained alongside the wider infrastructure quotes so the order can be placed without delay for site assessments to be undertaken etc.

That cost risk has been factored into funding considerations to account for potential inflationary increases in prices.

#### Risk 2: Cost increase on infrastructure works

Description: The infrastructure provider or Distribution Network Operators do not hold their prices from the time of bidding to the time or a works request being raised.

Impact: That the cost of the associated works increased from the time of bidding meaning the cost of the overall scheme will need to be managed. For example, by the operator needing to find additional funding to meet the increased cost of groundworks.

Mitigation: Infrastructure Providers have been asked to hold prices until orders can be placed following the ZEBRA 2 award announcement in March 2024.

One provider has confirmed their quote is valid for 6 months and we are waiting on confirmation from the other. We are confident that, by working with the operators and DNOs to complete all the necessary site evaluations etc to give them certainty that orders can be place soon after the ZEBRA2 funding announcement.

That cost risk has been factored into funding considerations to account for potential inflationary increases in prices.

#### Risk 3: Limited operator funding for new zero emission buses

Description: That bus operator funding is not available, or to a lesser extent, to afford the number of buses at the time of bidding. Or, there is a need to manage the number of buses to be purchased in line with available operator funding.

Impact: That the overall benefits are reduced across the areas where ZEBRA 2 funding is being bid for.

Mitigation: Surrey County Council has purposefully and proactively engaged with operators to ensure that the ZEBRA 2 bids are robust. This means focusing on those operators who have capacity in both funding and depot requirements to ensure that EV infrastructure can be delivered.

#### Risk 4: Ownership of vehicles purchased under ZEBRA2

Description: That there is insufficient clarity over bus ownership between the associated operators and the County Council following any successful ZEBRA 2 funding and orders for buses being placed.

Impact: That there is confusion over ongoing liability for maintenance of buses and associated infrastructure meaning that the overall scheme is not viable in the long term.

Mitigation: Specialist legal advice is being sought to ensure compliance the subsidy control requirements. This advice will also set out the basis by which the vehicles will be owned and operated along with the associated infrastructure alongside the agreement under which the buses will operator in Surrey.

#### Risk 5: Bus industry pressure means that new vehicles may not be used to their full extent

Description: That driver availability and increasing maintenance costs for example, mean that the new zero emission buses may not be fully utilised.

Impact: That the scheme benefits may not be fully realised.

Mitigation: Surrey County Council has purposefully and proactively engaged with operators to ensure that the ZEBRA 2 bids are robust. This means focusing on those operators who have capacity to deliver the scheme in full from the point of delivery of the new zero emission buses. As part of the operator participation in the ZEBRA 2 scheme, there is a commitment that the new vehicles will be operated along the routes included in the bid so that they are fully utilised.

### 8.3.5 Programme level Monitoring & Evaluation

LTA's should confirm that they will conduct the following as part of the programme-level M&E:

Participate in programme-level M&E activities as required, for example taking part in interviews or group discussion sessions:

Yes

Share relevant monitoring data in an electronic format (e.g. Microsoft Excel):

Yes

Share relevant monitoring data on a quarterly basis:

Yes

Ensure relevant monitoring data is collected automatically via telematics:

Yes

### 8.3.6 Scheme level Monitoring & Evaluation

LTA's should set out in **no more than 1,000 words** their plans for scheme-level M&E, including a logic map which sets out expected causal links between scheme inputs, outputs, outcomes and impacts:

A monitoring and evaluation plan is required to support an assessment of the extent to which the intended outputs (the scheme) and outcomes (intended benefits) have been delivered, and hence to capture lessons learned for Surrey County Council, the bus operators and the Department for Transport.

The scheme level evaluation of Surrey County Council's ZEBRA bid will support DfT's wider programme-level evaluation (across all successful ZEBRA bids). What is set out below is an outline of what SCC believes will be required and SCC will liaise with DfT to ensure that its data collection and analysis support the programme-level evaluation. The monitoring and evaluation plan will be delivered by Surrey County Council officers with oversight provided by the SCC Enhanced Partnership Board.

The scheme level evaluation will cover:

Process evaluation: this examines the activities involved in implementation, and covers key questions such as:

- How was the scheme delivered?
- Was the scheme delivered as planned?
- What worked well and what worked less well, and why?
- What could be improved?

Particular focus will be placed on preliminary activity such as engagement with infrastructure providers, DNOs and bus manufacturers and then the delivery of each aspect. This will help inform future activities around the sponsorship, procurement and specification of vehicles and depot works, the execution of these works, vehicle and equipment commissioning, staff readiness and training and how any teething difficulties were addressed.

Impact Evaluation: this focuses on measurable changes which either directly relate to an objective, or indirectly contribute to measurement of performance against an objective (through establishing the causal mechanisms and linkages) of the intervention. The key questions include:

- What difference did the scheme make?
- What measurable outcomes, both intended and unintended, occurred?
- How much of these outcomes can be attributed to the intervention?
- How has the context influenced outcomes?

An outline logic map for the impact evaluation has been submitted with this application as Annex 7.

Value for Money or Economic Evaluation - this considers:

- Did the benefits justify the costs?
- How do the measurable scheme costs and benefits compare with the appraisal set out at the submission, notably the results from the Green Bus Tool analysis?

The monitoring and evaluation will cover a range of output, cost and carbon-related metrics that are intended to inform the DfT's programme-level evaluation. Key questions are:

- What is the difference between a battery-electric bus (BEB) and an equivalent ICE bus?
- How do the metrics change over time?

These are described below:

BEBs and charging infrastructure outputs:

- Number and type of BEBs purchased
- Number and type of BEBs in operation
- Number and type of internal combustion engine (ICE) buses replaced
- Number (and capacity) of charging facilities introduced
- Charging methodology

Scheme costs:

- Purchase cost per BEB
- Purchase cost per equivalent ICE bus
- Cost of electric charging infrastructure (upfront cost)

#### Carbon outcomes:

- Daily BEB mileage and energy consumption
- Daily diesel mileage and fuel consumption
- And hence, the change in CO<sub>2</sub> emissions

#### Social value outcomes:

- The number and percentage of maintenance staff trained to maintain large battery-electric vehicles
- Change in the percentage of Euro VI ICEs plus BEBs in the fleet
- Impact on people with sensory disabilities – likely to focus on the impact of the change in noise levels on perceptions of safety

#### Bus passenger outcomes:

- Attitudinal surveys
- Change in bus passenger ridership

#### Environmental outcomes:

- Change in air quality levels in selected sensitive areas such as AQMAs
- Impact on noise emissions at key sensitive sites
- One potential outcome that we don't currently expect with this bid but which we should be alive to is whether the replacement of ICE buses with BEBs enables buses to reach places that they cannot currently serve, such as environmentally-sensitive town centres

#### Bus operations outcomes:

- Vehicle reliability data – amount of time vehicles recorded as 'off road', a breakdown of the reasons for being recorded as 'off road' and the number of breakdowns / km – for BEB and equivalent ICE bus
- DNO connection and charging equipment availability and reliability
- Interventions required to vehicle batteries and charging equipment over and above routine maintenance (e.g. changing cells under warranty)
- Change in bus operations and maintenance cost of BEB compared to ICE and change over time
- Average battery state of charge before / after charging, kms operated between charges: change over time and with seasonality

These are the outputs and outcomes that Surrey County Council currently expects to monitor. Surrey County Council will liaise with DfT's programme monitoring plan in designing its monitoring and evaluation plan. It envisages a combination of continuous and periodic data collection. For instance, data on energy consumption and vehicle reliability are likely to be collected on a continuous basis, whereas bus passenger surveys are likely to be undertaken on a periodic basis. Some elements, such as changes in air quality at AQMAs or surveys of people's view of noise, are likely to need to be surveyed before the introduction of the BEBs in order to establish a baseline.

END OF DOCUMENT

An electronic copy only of the bid including any supporting material should be submitted to [BUSES@dft.gov.uk](mailto:BUSES@dft.gov.uk)