

Zero Emission Bus Regional Areas Scheme – 2021 to 2022 Application Form

Call for Expressions of Interest

Applicant Information

Local transport authority: Norfolk County Council

(For joint bids only) Which local transport authority is the lead bidder: n/a

Area within authority covered by bid: Greater Norwich

Bid Manager Name and position: Jeremy Wiggin, Transport for Norwich Manager

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Submission of proposals:

Applications to the Scheme will be assessed against the criteria set out here and in the guidance document. Please adhere to word limits. We will not accept any additional information unless specifically requested.

Proposals must be received no later than 17:00 on the following days.

- Fast track process 5pm on 21st May 2021
- Standard process 5pm on 25th June 2021.

You will receive confirmation that we have received your proposal within 1 working day.

An electronic copy only of the bid including any supporting material should be submitted to <u>buses@dft.gov.uk</u>.

Please include "**ZEBRA (Fast track Process) Local Transport Authority name**" in the subject line of the email if you are applying under the fast track process.

Please include "**ZEBRA (Standard Process) Local Transport Authority name**" in the subject line of the email if you are applying under the standard process.

Enquiries about the Fund may be directed to <u>buses@dft.gov.uk.</u>

Transparency and privacy

Please refer to the guidance for this scheme before completing the application form to understand how DfT will manage your data.

SECTION A: Mandatory Questions

Areas must satisfactorily answer all of the questions in this section to be eligible to progress to Phase 2 of the scheme. If you would like further information, please contact the Department for Transport at <u>buses@dft.gov.uk</u>.

Areas must provide the information requested in questions A1-A5.

A1. In total, how many new zero emission buses will your proposal deliver?

This proposal will deliver 15 new, zero emission single decker buses. This will convert, 20% of the current fleet at Roundtree Way Norwich depot to electric operation and future proof the power supply for further EV deployment.

First Bus is bidding for a total of 193 new electric vehicles aggregating together five of our English depots based around the new REDACTED bus. REDACTED.

The current Norwich Fleet is predominantly double decker. The focus on a single decker vehicle for this application has resulted in the current scale of application for Norwich. However, not only will this bid see a notable change in the number of zero emissions vehicles in service in Norfolk, it also provides a strong base on which to build a bigger electric fleet.

A2. Total DfT funding sought (£m)

While there is no minimum or maximum size for bids the department is interested in supporting at least three areas across the ZEBRA scheme as a whole, so we expect to see schemes that are approximately $\pounds 25m - \pounds 35m$. This is designed to encourage a wide range of bidding areas to come forward and to ensure DfT are able to fund at least three areas across the whole scheme.

The total DfT funding sought is £3,239,325.

A3. Third party funding contributions (£m)

The third party funding contribution is £3,614,775.

A4. Funding from other government schemes (£m)

Please set out any funding from other government schemes that is intended to be used alongside funding from the ZEBRA scheme.

There is no other funding from other government schemes that will be used alongside funding from the ZEBRA scheme.

A5. Total cost of the proposal (£m):

This should include DfT funding as specified in A2, any third party contributions as specified in A3 and any funding from other government schemes as specified in A4.

The total cost of the proposal is £6,854,100.

Areas must be able to answer yes to question A6-A12 to be able to progress to Phase 2.

A6, If your bid is successful, are you able to invest DfT funding within the time outlined by your scheme?

Yes, we will be able to invest DfT funding within the timeframes outlined in the guidance.

Vehicles would all be operational within the required ZEBRA timeline of 2 years from funding award (March 2024)

Infrastructure timeline will be synched to the expected vehicle availability. However, as a guide, we expect:

• REDACTED

A7. If your bid is successful, are you able to capitalise DfT grant funding?

Yes, we would be in a position to capitalise DfT grant funding.

A8. Have you considered whether additional zero emission buses are needed to replace existing buses?

Evidence suggests that replacing diesel buses with zero emission buses can require additional zero emission buses to provide the same level service as provided by diesel buses. Areas should set out how many additional zero emission buses are needed to replace existing buses. If areas are of the view that additional zero emission buses are not required please set out why.

Yes, this issue of whether additional zero emission buses are needed to replace existing buses has been fully considered.

This proposal will allow for the replacement of 15 Euro 3 single decker vehicles in Norwich on a 'like for like' basis with 15 single decker fully electric buses. There will not therefore be an increase in vehicle numbers due to the move to electric vehicles.

The routes chosen for this bid will operate in Greater Norwich and are based on the ability to operate single deck vehicles, from a capacity perspective, and the ability to operate the associated mileage, from a battery range perspective.

For information, the bus routes chosen for this proposal are the following:

- Green Line 15 / 15A / 15B;
- Yellow Line 29;
- Purple Line 39; and
- Charcoal Line 40 / 40A.

A9. Have you provided a breakdown of infrastructure costs for your proposal?

Infrastructure costs could include (but are not limited to): cost of charging unit or refuelling stations electrical or other power components; civil engineering works, labour costs (for installation); hardware costs; capital costs of developing associated software systems; surveys at the point of procuring the infrastructure provided they can be capitalised; upgrades to the energy grid to cater for increased energy demand.

Yes, infrastructure costs for this proposal have been fully considered and are summarised in **Table 1** below.

Table 1: Summary of infrastructure costs

Distribution Network Operator (DNO) costs	Costs of charging equipment	Civils costs	
£787,500	£367,500	£464,100	

Note: a 5% uplift has been applied to the DNO cost to reflect that orders may not be raised until 2022.

The quotation for the electrical infrastructure upgrade costs, provided by UK Power Networks, is enclosed with this application as **Appendix A**, REDACTED.

A report by energy consultants Green Jam, which is based on a review of the specific requirements needed for the First Bus depot at Roundtree Way in Norwich, is enclosed with this application as **Appendix B**, REDACTED.

REDACTED

A10. Does your proposal have the support of bus operator(s) in the area?

The proposal requires the support of at least one bus operator operating in the area who will operate the zero emission buses. The bid does not, however, need the support of all bus operators operating in the area. If local transport authorities are not able to provide this evidence of support from operators they **must** explain why.

Yes, this proposal has the full support of First Bus. A letter of support from First Bus is enclosed with this application as **Appendix C**, REDACTED.

Discussions were held with all bus operators in Norfolk and although many are keen to transition to zero emission or lower emission vehicles, only First Bus were in a position to provide the financial and operational commitment to participate in this application.

Additional letters of support are provided by:

- New Anglia Local Enterprise Partnership (Appendix D); and
- Norwich City Council (Appendix E).

A11. Have you spoken with any energy companies when preparing your proposal?

Energy companies could include Distribution Network Operators, Independent Distribution Network Operators, energy supplier, energy storage companies, smart charging providers or hydrogen fuel providers.

Yes, we have engaged with energy companies when preparing this proposal.

First Bus has had extensive engagement with the Distribution Network Operator (DNO) for the Norwich area, which is UK Power Networks (UKPN). Evidence of this is outlined in **Appendix A**, REDACTED. In addition, First Bus has also engaged with an energy consultant, the findings of which are outlined in **Appendix B**, REDACTED.

Norfolk County Council is currently working with UKPN on a separate charge collective project that is aiming to install electric vehicle charging points (EVCP) on residential streets in Norwich where off-road parking is not available. As part of this, we have formed strong relationships with local smart charging providers, such as Anglia Car Charging. Our involvement in these separate initiatives with energy companies highlights our commitment to transition to zero emissions.

A12. Does your proposal comply with the accessibility requirements set out in the scheme guidance?

The scheme guidance sets out a number of accessibility requirements including: requiring buses to incorporate equipment to identify the route, each upcoming stop, and the beginning and end of diversions: providing an induction loop to aid direct communication between drivers and passengers who use a hearing aid and providing an additional flexible space in addition to the mandatory wheelchair space, suitable for a second wheelchair user and/or at least two unfolded pushchairs or prams.

Yes, our proposal fully complies with the accessibility requirements set out in the scheme guidance. REDACTED

SECTION B. Defining the place

This section will seek a definition of the area to be covered by the Zero Emission Bus Regional Area. Areas should:

- Include information setting out the extent of the area to be covered by the proposal

 the defined area. If the defined area is different to the area covered by the local
 transport authority please make this clear. Please provide maps if required.
- Provide details on the bus sector including naming **all** operators who operate services in the defined area, their market share and fleet sizes. This should include both operators who are supporting your proposal and will be operating the zero emission buses and other bus operators in the defined b area.
- Clarify what proportion of bus services in the defined area will be operated using zero emission buses.

Please limit your response to 500 words. Please provide maps as annex documents if required.

The defined area for the Norfolk application is Greater Norwich. This is shown in **Appendix H** and has been chosen as this is the area of worst air quality in Norfolk and where the largest number of buses operate.

There are different metrics that could be used to define market share for all bus operators operating within the defined area. We have looked at the following, which is summarised in **Table 2**:

- Number of stop departures for each bus operator on a weekday in the Greater Norwich area; and
- Number of services operated in the Greater Norwich area.

Bus Operator	No. of stop departures	%	No. of services	%
First	40,019	85.21	49	52.12
konectbus	4,816	10.25	17	18.09
Sanders Coaches	1,062	2.26	15	15.96
Semmence	452	0.96	4	4.25
Our Bus	414	0.88	4	4.25
Borderbus	91	0.19	1	1.07
Simonds Coaches	70	0.15	3	3.19
Coach Services	40	0.10	1	1.07
TOTAL	46,964	100	94	100

Table 2: Market share based on stop departures and number of services operated.

Information on fleet sizes, vehicle composition (single / double decker) and Euro engine specification is outlined is **Table 3** below.

				Emission Standard of Vehicles - Number in fleet serving the defined area			
Bus Operator	No. of vehicles	Number of single decker vehicles	Number of double decker vehicles	3	4	5	6
First	165	40	125	35	6	83	41
Konectbus	32	6	26	0	0	29	3
Sanders Coaches	20			See com	ment below		
Semmence	3	3	0	1	2	0	0
Our Bus	3	3	0	0	1	1	1
Simonds Coaches	4	3	1	1	0	3	0
Coach Services	1	1	0	0	0	0	1
Borderbus	7	3	4	0	0	7	0
TOTAL	235	0	0	0	0	0	0

Table 3: Fleet size, vehicle composition and Euro standard of buses in defined area

Note: We don't have specific details of vehicle type and emissions from Sanders Coaches at the time of this EOI submission. However, we know that the majority of vehicles operated into Norwich by Sanders Coaches are double decker vehicles to cater for the large demand for these long distance services.

This proposal will allow for the replacement of 15 Euro 3 single decker vehicles in Norwich on a 'like for like' basis with 15 single decker fully electric buses. There will not therefore be an increase in vehicle numbers due to the move to electric vehicles. The majority of the Norwich First Bus fleet is operated by double deckers, so this proposal covers 38% of the single decker fleet.

The routes chosen for this bid will operate in Greater Norwich and are based on the ability to operate single deck vehicles, from a capacity perspective, and the ability to operate the associated mileage, from a battery range perspective.

The bus routes chosen for this proposal are outlined below. These can also be found in the bus map in **Appendix I**.

- Green Line 15 / 15A / 15B;
- Yellow Line 29;
- Purple Line 39; and
- Charcoal Line 40 / 40A.

This proposal relates to First Bus only and equates to the following:

- 7 of their 49 services being zero emission (14%)
- 15 of their 165 vehicles operating in Greater Norwich being zero emission (9%)

Looking at all the services and buses in the defined area, this equates to:

- 7 of the 94 services being zero emission (8%)
- 15 of the 235 vehicles being zero emission (6%)

SECTION C: Ambition

This section will seek evidence of the level of ambition from the local transport authority to decarbonise their bus fleets, support bus services and decarbonise transport.

C1. Public transport ambitions

Areas should:

- Provide clear explanation of your ambition to decarbonise the bus fleet in the defined area and how this proposal will support this ambition. If the defined area is different to the local transport authority area please explain your ambitions to decarbonise the bus fleet in your local transport authority area and how this proposal will support this ambition.
- Provide evidence of existing plans to support the provision and operation of local bus services in the area. This could include existing partnership working between the local transport authority and bus operators, bus priority measures, improvements to information about bus services.
- Include complementary policies to decarbonise transport in the area.
- Explain how the proposal supports wider ambitions to increase public transport use and active travel in the area.

Please limit your response to 500 words.

Local policies

Norfolk County Council (NCC) is committed to decarbonising transport and adopted a new <u>Environmental Policy</u> in 2019, which sets out to achieve 'net zero' carbon emissions on our estates by 2030, but within our wider areas, work towards 'carbon neutrality' also by 2030. Key elements of this policy are:

- Supporting the creation of green infrastructure in our key urban areas;
- Supporting alternatives to car travel;
- Encouraging sustainable travel on all new developments; and
- Supporting initiatives that lead to clean air, such as developing new proposals within the forthcoming <u>Local Transport Plan</u> (LTP).

A key objective of our new draft LTP is "to improve the health of our residents by improving air quality and encouraging active travel options to improve health and fitness and also helping reduce our greenhouse gas".

We are currently renewing our Transport for Norwich Strategy, which will be consulted on during Summer 2021 and adopted late-2021. Our vision is that Norwich is a place where carbon emissions from transport are reduced. After devising a carbon budget for surface transport, a baseline will be set, and we will use this to assess potential interventions. Monitoring the efficacy of interventions using the carbon budget will guide further delivery.

Regional policies

We work closely with Transport East, who has outlined in its "<u>Decarbonisation Evidence</u> <u>Base and Strategic Recommendations Report (Nov 2020)</u>" that public transport and active transport is a key area to focus on in order to support the reduction in carbon emissions across transport.

Existing plans to tackle carbon

Many of the measures outlined in the Norwich City Council 2020 Air Quality Action Plan (AQAP) - Appendix G – are ongoing or are programmed for implementation. A recent review (June 2021) of the AQAP by the City Council approved:

- Expansion of the Low Emission Zone (LEZ) in Norwich;
- Tougher restrictions on emissions standards within the LEZ;
- Promotion of low emission public transport through grant applications; and
- Further expansion of the cycle network.

Many of the proposals in the AQAP are being delivered through the £32m Transforming Cities Fund (TCF) programme in Norwich, which will deliver:

- Nearly 5km of new dedicated bus lanes;
- Removal of pinch points on the network;
- Traffic signal priority for all buses;
- Nearly 9km of new cycle routes;
- Nearly 40 additional, safe crossings for pedestrians.

It is through the delivery of the AQAP and TCF programmes that First Bus has committed investment in Norwich for this ZEBRA application.

In terms of wider proposals to increase active travel, NCC is committed to the delivery of a co-ordinated and sustained behaviour change programme to encourage the use of more sustainable modes of transport. This is being rolled out during 2020/21 through funding from the Access Fund and Active Travel Fund.

We have a strong working relationship with our bus operators and locally we have a Voluntary Quality Partnership (the 'Norwich Bus Charter'). This will form the basis of our Enhanced Partnerships and Bus Service Improvement Plans going forwards – decarbonising our bus fleet will be central to this.



C2. Community benefits

Please highlight any community benefits from your proposal. This could include economic development in the area or the creation and/or retention of jobs and apprenticeships related to the maintenance of zero emission vehicles, including batteries and fuel cells, and supporting infrastructure.

Please limit your response to 500 words.

The success of a ZEBRA bid in Norwich would enable First Bus to train their existing engineering team of 12 at their Roundtree Way depot, as well as training their drivers to operate electric vehicles. The opportunity would also be taken to familiarise local emergency services with the electric vehicles and charging set up. This outcome fully supports the fact that Norwich is seeing exciting, emerging economic sectors, which includes clean energy. With high levels of employment and one of the largest county economies, worth £18 billion, the delivery of zero emission public transport vehicles in Norwich strengthens this area of economic development.

Regarding community benefits, Transport East outlined in its "Decarbonisation Evidence Base and Strategic Recommendations Report (Nov 2020)" the importance of working with employers across the public and private sectors to develop 'green travel to work' strategies and policies. It also refers to the need for an aligned position on decarbonisation efforts amongst stakeholders such as local authorities, employers, workers, and local residents so as to ensure that everyone benefits from the investment. We are fully committed to working with Transport East to ensure these decarbonisation efforts are maximised.

The New Anglia Local Enterprise Partnership (LEP) 2021 Delivery Plan clearly sets out Norfolk and Suffolk as being the UK's Clean Growth Region, at the forefront of tackling the challenges and opportunities of climate change. Supportive of this proposal for zero emission buses, the LEP (see **Appendix D**), working with NCC and other stakeholders has the aim of delivering the following through the Delivery Plan:

- Facilitating the development of a Decarbonisation Academy, supporting the development and transition of the skilled workforce required;
- Mapping how existing jobs need to evolve and the new jobs required to support and develop a workforce required for the Green Industrial Revolution;
- Exploring the opportunities of a regional decarbonisation investment bank that would support unlocking clean growth investments;
- Mapping out the key investments that will support the development of a clean growth workforce and sustainable economy; and
- Working with regional partners to develop an alternative fuels strategy which will support the move to the decarbonisation of transport.

At a more local level, the Norfolk Strategic Infrastructure Delivery Plan (NSIDP) sets out the ambitions of the area to focus on sustainable energy generation and significant investment in transport to improve the connectivity of the region and ensure labour markets and supply chains are protected. The County Council aims to support local partners to invest in energy and water efficiency, storage, and management infrastructure. Economic opportunities will arise from:

• Delivering an integrated approach to infrastructure and inter-regional connectivity to maximise clean growth; and

• Developing exemplar low carbon energy generation, networks and storage which benefit local businesses and communities.

Sitting alongside the NSIDP, there are numerous more detailed work streams generating projects in areas such as sustainability, renewable energy and green economy. The details of some of these projects can be found in proposed works supporting the Norfolk County Council's Environmental Policy and Norfolk Strategic Planning Framework.

C3. Support for your proposal and wider vision

Provide evidence of support for your proposal and wider vision, such as letters of support or evidence of engagement, from partners.

This **must** include evidence of support from the bus operator(s) who will operate the zero emission buses. You **do not** need to include evidence of support from all bus operators within the area, only the operator(s) who will be operating the zero emission buses. This evidence must be a signed letter by both the CEO/equivalent level of the company and the local MD, committing to investing in the buses and operating them in the defined area e for a minimum of 5 years.

Local transport authorities that have not included this evidence must clearly set out the reasons for this.

You **must** also include evidence of engagement with an energy company. Energy companies could include Distribution Network Operators, Independent Distribution Network Operators, energy supplier, energy storage companies, smart charging providers or hydrogen fuel providers.

Areas may also wish to include evidence of support from other relevant bodies, depending on the proposal, for example:

- Other tiers of local government
- Local Enterprise Partnerships
- Local Energy Hub
- Leasing companies
- Finance companies

Please limit your response to 1000 words. Evidence of support, such as letter of support, can be included as annex.

This proposal has the full support of First Bus. A letter of support from First Bus is enclosed with this application as **Appendix C**, REDACTED. Discussions were held with all bus operators in Norfolk and although many are keen to transition to zero emission or lower emission vehicles, only First Bus were in a position to provide the financial and operational commitment to participate in this application.

This proposal has the full support of the New Anglia Local Enterprise Partnership (LEP) and a letter of support is enclosed with this application as **Appendix D**.

This proposal has the full support of Norwich City Council and a letter of support is enclosed with this application as **Appendix E**.

First Bus has had extensive engagement with the Distribution Network Operator (DNO) for the Norwich area, which is UK Power Networks (UKPN). Evidence of this is outlined in **Appendix A**, REDACTED. In addition, First Bus has also engaged with an energy consultant, the findings of which are outlined in **Appendix B**, REDACTED.

Norfolk County Council is currently working with UKPN on a separate charge collective project that is aiming to install electric vehicle charging points (EVCP) on residential streets in Norwich where off-road parking is not available. As part of this, we have formed strong relationships with local smart charging providers, such as Anglia Car Charging. Our involvement in these separate initiatives with energy companies highlights our commitment to transition to zero emissions.

This initiative has the full support of the Transport for Norwich (TfN) delivery partnership we have in place with Norwich City Council, South Norfolk Council and Broadland District Council. This partnership will oversee the preparation of an appropriate business case and the delivery of any subsequent programme of zero emission public transport. Governance in place for the TfN delivery partnership is:

- Norfolk County Council Cabinet;
- TfN Fund Joint Committee;
- TfN Stakeholder Liaison Group;
- TfN Project Board;
- TfN Co-ordination Group; and
- TfN Project Delivery Team.

SECTION D: Air Quality

This section will seek evidence of the air quality challenges in the area and how your plans tackle air quality in the area. Areas should:

- Set out the air quality challenge in the area, such as whether the area is identified in the national assessment as exceeding statutory limits.
- Set out how the proposal would address the local air problem.
- Provide evidence of existing transport plans to tackle air quality and greenhouse gas emissions.

Please limit your response to 500 words.

We will not accept bids covering places that cannot show that they have air quality issues.

Norwich has an air quality issue that is recognised locally, regionally and nationally as needing urgent action. The World Health Organisation (WHO) has identified Norwich as one of 32 UK cities exceeding the WHO air pollution levels.

Norwich City Council has monitored air quality in the city since 1998. In November 2012, all four previously declared Air Quality Management Areas (AQMAs) were amalgamated into a single AQMA, which covers large areas of the city – see **Appendix F**. Castle Meadow within the AQMA acts as a transport hub, containing many bus stops that serve the wider Norwich area and is the most heavily used street for bus movements in the city.

The major pollutant source in the city is road traffic and source apportionment exercises in Norwich has identified oxides of nitrogen from road traffic to be the most significant source of nitrogen dioxide (NO₂) and, more specifically, buses to be the main contributor. All of the buses serving the AQMA are currently diesel and account for the majority of NO_x on our most polluted streets where only buses and taxis are allowed.

The automatic analyser in the Castle Meadow LEZ shows that, despite efforts to improve air quality, there are still challenges, as annual mean NO₂ levels have fairly consistently exceeded the objective level. Historic data shows the exceedance to oscillate around $14\mu g/m^3$ above the objective level. During 2019, the 1 hour mean was also exceeded, albeit only by 1 additional exceedance of the 200µg/m³ allowance of 18 times/year.

There are a number of city centre streets where NO₂ annual mean levels exceeded the European limit in 2019, which include Castle Meadow (45 μ g/m³) and St Stephens Street: (41 μ g/m³).

Exposure to emissions from the bus fleet on Castle Meadow and St Stephens Street is a particular concern with large numbers of new residential (student) dwellings on these streets recently becoming occupied. In addition, these streets are made up of near continuous business frontages and bus stops, as well as Norwich Castle, with associated high footfall.

Measures to reduce NO₂ from road traffic will also, to some extent, have a positive benefit on reducing PM_{2.5} levels - although PM_{2.5} in Norwich is mostly a transboundary rather than city derived pollutant and hence is strongly affected by meteorology.

As an early indication of the expected benefits of this scheme, First Bus have generated the following:

- Replacement of 15 [EURO III] diesel vehicles with EVs, based on FY2021 [fuel and mileage] figures, would likely equate to a reduction in carbon emissions of more than <u>600 tonnes</u> when applying average fuel and mileage figures from FY2021*
- When applying an air emissions inventory approach, we have estimated a reduction in local air quality related emissions (NOx and PM2.5) of circa <u>9.2 tonnes</u> (9,213 kg)**.

*the carbon reduction estimate is based on an emissions conversion factor of 2.51072 kgCO2 per km and for tailpipe emissions only, i.e. 'Tank to Wheel' (TTW). A calculation based on 'Well to Wheel' (WTW) carbon reduction could be undertaken, and with emissions associated with grid electricity for the charging of the EVs offset for a fuller picture.

**The following exhaust Emission Factors have been used for EURO III vehicles - 9.847278171 g/km NOx / 0.180627988 g/km PM2.5

SECTION E: Value for Money

This section will seek evidence how you meet the Value for Money criteria, as set out in the guidance. Areas are also required to submit a separate value for money proforma that has been published alongside the application form. This spreadsheet requests basic information about the proposed investment to enable the value for money to be assessed using the Department's **"Greener bus model**".

The information in a completed pro forma, enables the model to estimate the greenhouse gases (GHG) emissions savings, other environmental & social impacts such as reduction in particulate matter (PM) and nitrogen oxide (NoX) emissions and savings & costs in the public and private sectors. By quantifying the key impacts of a proposed investment, this model helps provide decision-makers with as full a view as possible, about impacts on the environment, society, transport operators and the government finances.

The model provides a measure of the 'Value for Money', in the form of a benefit cost ratio (BCR) alongside other metrics such as the total estimated GHG savings and a cost effectiveness indicator estimating the net cost per tonne of carbon saved. These outputs will be used to score bids based on value for money.

The model does not capture every possible impact from a proposed investment, such as impacts from any resulting increases in patronage, improvement to the quality of journeys, or increased reliability. Where wider impacts (positive or negative) from investment are expected these should be stated, in the pro_forma, as non-monetised impacts. These will be considered when making a value for money judgement, as set out in the Department value for money framework.

SECTION F: Deliverability

This section will seek evidence of how the Zero Emission Bus Regional Area will be delivered, and demonstrate that plans are credible and deliverable.

F1. Method of delivery and timescale for implementation

Establish the method of delivery, to cover:

- How you will work with local bus operators and other partners to deliver the proposal
- Any public consultation or third-party permission that will be required (e.g. for infrastructure)
- Explain any mitigations put in place for SMEs.
- Timescales for implementation, including when orders will be placed for zero emission buses and when supporting infrastructure will be delivered.
- Please demonstrate how your plans are credible and deliverable in the time proposed, and that any risks have been understood and mitigated

Please limit your response to 1,000 words.

Working with bus operators

Norfolk County Council (NCC) has an excellent reputation for project delivery and strong governance will be put in place to administer, deliver and monitor the programme. The project will be overseen by a Project Board that will include appropriate officers from within the County Council, District Council partners, First Bus and supplier(s). This Board will meet regularly and no less than quarterly.

We have a strong track record of supporting our transport providers and key stakeholders to apply for funding for new technologies, as is evidenced through joint funding submissions being made to the:

- All Electric Bus Town Fund;
- Air Quality Grant Schemes;
- Clean Bus Technology Fund;
- Better Bus Area Fund;
- Transforming Cities Fund; and
- Future Mobility Zone Fund.

We have a strong working relationship with our bus operators and locally we have a Voluntary Quality Partnership (the 'Norwich Bus Charter'). This will form the basis of our Enhanced Partnerships and Bus Service Improvement Plans going forwards – decarbonising our bus fleet will be central to this. We are currently working with bus operators, in response to the 'Bus Back Better' strategy, to establish Enhanced Partnerships and Bus Service Improvement Plans. All bus operators are committing to Enhanced Partnerships and zero emission targets and deliverables will be integrated within these partnerships and plans.

Transport for Norwich Communications Strategy

Any consultations required to deliver the ZEBRA project, such as electrical substation / cabling works and modifications to the existing Rowntree Way bus depot, would be delivered under the Transport for Norwich (TfN) brand within the Greater Norwich area, which is a partnership led by Norfolk County Council with partner local authorities Norwich City, Broadland District and South Norfolk councils. The partnership provides the mechanism through which strategic infrastructure and service improvements, such as zero emission buses, are delivered. Communications around any works required to support the ZEBRA project will highlight the strategic benefits brought by this investment.

We aim for a consistent approach to consultation across all TCF projects:

- Letter drop to frontages directly affected by a scheme (eg. electrical substation works, depot modifications, etc), including a clear, branded plan of the proposals and information on the reasons behind them;
- All consultations available on the council's consultation portal, Citizen Space, with the option to request material in other formats and to respond through other channels;
- Direct engagement with specific groups, such as those representing users with specific needs;
- Non-statutory consultations to run for three weeks to allow plenty of opportunity for engagement; and
- Promotion of consultation opportunities to a wider audience through media, social media and communications channels available through the partnership.

Risk management

Governance for the project is key and we will ensure a structured and systematic process for identifying, assessing and managing risk for the programme. This will provide robust challenge throughout the delivery of the project and ensure that regular assessment of performance measures and risks is undertaken. This aligns with our corporate risk management approach.

The most significant risks are set out in **Table 4** below. These will be refined and expanded on should this proceed to a business case application.

Risk	Impact on End User	Mitigation
Power supply upgrade is	The wide range of monetary	Identify options to deliver
not possible within the time-	and non-monetary benefits	power upgrades in phases.
scales of the project	to users are delayed or	
	don't happen	Consider use of comple-
		mentary technologies, such
		as battery storage

Table 4: Summary of key risks

Risk	Impact on End User	Mitigation
Power supply upgrade costs far exceed initial esti- mates		Close engagement with DNO throughout planning and delivery.
Insufficient electrical power to charge buses	Fewer electric buses may be introduced, at least in the short term	Close engagement with DNO and vehicle manufac- turer throughout planning and delivery.
		Review the routes EV buses operate on (reduced mileage)
Required planning permis- sion for power upgrades / civils not granted or delayed	The wide range of monetary and non-monetary benefits to users are delayed or don't happen	Close engagement with ap- propriate planning authority / officers, as well as DNO, First and contractors.
		Ensure good levels of en- gagement and consultation are maintained with resi- dents and other interested stakeholders.
New buses take longer to build than expected	The wide range of monetary and non-monetary benefits to users are delayed or don't happen	Close engagement with ve- hicle manufacturer. Con- sider phased delivery and implementation.
		Consider design changes that may shorten develop- ment and build timescales.
		Switch to an alternative manufacturer's electric ve- hicle.
Cost of new buses exceeds initial estimates	Fewer electric buses may be introduced.	Close engagement with ve- hicle manufacturer.
		Consider design changes that may reduce vehicle costs.
Mileage range of new buses doesn't meet expec- tations	The wide range of monetary and non-monetary benefits to users are delayed or don't happen	Close engagement with ve- hicle manufacturer regard- ing technical options to in- crease range.

Risk	Impact on End User	Mitigation
		Reallocate buses to alterna-
		tive routes.
		Consider option for 'top up' charging during the day.

Mitigations for SMEs

At the present time, there are no identified mitigations required for SMEs.

Delivery Timescales / Costs

We are confident that will be able to invest DfT funding within the timeframes outlined in the guidance. First are targeting first deliveries during 2023 with all vehicles in operation by the required deadline in 2024 and are working closely with REDACTED to ensure they deliver a quality bus product over the Zebra time period. If this proves not to be possible, it is the intention of First to switch to an alternative manufacturer's electric vehicle.

The infrastructure costs in the bid are a mix of firm and provisional elements. The grid connection costs and plans are based on completed engineering assessments for the Norwich depot which will provide a "Firm" connection for resilient operation. It is hoped that costs can be further reduced through a mix of value engineering and ensuring competition for the contestable works. These costs are due to be confirmed/finalised over the next 2– 4 weeks.

Any requirement for planning permission will be identified at the next stage. Strong relationships between First, NCC and contractors will be maintained to support any required applications. It is always the intention of First to be good neighbours at all of their operating locations and First will engage throughout the infrastructure construction phase. Ultimately, this introduction of electric vehicles will improve the air quality and noise levels of the depot and surrounding area.

The expected steps and indicative timeline for infrastructure (based on First Bus experiences at other sites and initial discussions around work at Roundtree Way):

• REDACTED

Vehicles

REDACTED

F2. Monitoring and evaluation

Please provide indicative details of how monitoring and evaluation will be used to ensure learning about the project and inform future schemes. A detailed monitoring and evaluation plan is not required at this stage but should explain how the approach to delivering services will ensure that future learning is maximised.

Please limit your response to 500 words.

A detailed Monitoring and Evaluation (M&E) Plan will be developed that will build upon the successful M&E work that was undertaken as part of previous clean bus projects the County Council has worked on, such as the Clean Bus Technology project. We would look to work with the DfT regarding the design of the evaluation framework to ensure it meets both Government and local needs.

We already have M&E plans in place for the works we are delivering through other grant funded projects, such as the DfT Access Fund (our 'Pushing Ahead' initiative) and our Transforming Cities Programme and will look to see what synergies there are between these and the ZEBRA initiative. The current COVID-19 pandemic has forged closer working relationships with colleagues in Public Health and Active Norfolk, particularly in terms of data sharing, analysis and communications, which we will also look to build on going forwards.

Governance and resourcing for the implementation of the M&E plan will be designed to ensure that M&E is fully integrated into wider project delivery while remaining proportionate and cost effective. A number of reports are proposed:

- a baseline report (pre-implementation);
- one year after report; and
- a five years after report.

Evaluation will also inform our partners, including District Councils, the New Anglia Local Enterprise Partnership (LEP) and the Norwich Business Improvement District (BID), of the impact of our programme on the local economy and its contribution to the productivity and environmental objectives within the city region.

Monitoring is already conducted within the AQMA and the city also benefits from having a Government-owned AURN urban background station in its area where data can be accessed from the Defra website.

Use will be made of existing communication channels already in place for 'Transport for Norwich'. Increasingly use is now made of social media by the County Council to share information and promote activities.

We would be keen to work directly with other local authorities who may be successful with ZEBRA applications, which could be done in several ways, including:

- Norfolk County Council hosting an 'open day' to share knowledge and encourage other cities to do the same;
- Attend other formal events arranged by other local authorities or the DfT; and
- Visiting other local authorities on an informal basis to discuss specific issues that are relevant to tackling air quality.

F3. Procurement, State Aid and subsidy rules

Please confirm you have received advice on legal requirements in relation to procurement, subsidy control and state aid.

Please also demonstrate how you will abide by legal requirements in relation to procurement, subsidy control and state aid, including an explanation, together with supporting evidence, of how you will comply with the principles under the UK-EU Trade and Cooperation Agreement.

Norfolk County Council (NCC) has received legal advice in relation to issues of procurement, subsidy control and state aid. Taking each in turn:

- 1. NCC does not believe procurement is directly applicable to this project. The project is looking to provide a grant to a local bus operator to replace a number of diesel buses with electric ones and to install the necessary infrastructure, on condition that they meet any outputs required and provide any match funding needed. NCC is therefore not procuring a contract for service or purchasing goods to which the Public Contracts Regulations 2015 would apply. It could be made a condition of any grant to be agreed with the bus operator that any work they do on receipt of the funding will be competitively procured to provide some safeguards. In the event that the DfT considered that procurement rules could apply, they can be reassured that NCC undertook an exercise to choose its partner for this project. It gave all local bus operators operating in the defined area an opportunity to express interest in the project but only one did so.
- 2. Subsidy control and compliance has been considered in accordance with the principles under the UK-EU Trade and Cooperation Agreement. NCC has considered who the beneficiaries could be. As the benefit to end users will be social and not economic, and as NCC will simply be passing monies on in its capacity as a local authority (receiving no benefit itself), this could only be the bus operator. That said, NCC does not believe that this award will lead to a breach of subsidy control as the award of the funding will not have a harmful or distortive effect on trade or investment within the UK or internationally, being a local matter. Furthermore, the funding will target infrastructure development in order to achieve wider social objectives and will be at considerable cost. The bus routes concerned are in a zone of high levels of air pollution in the city centre. The wider environmental and social objectives are to tackle carbon emissions, ensuring clean air quality and to contribute to community health outcomes.
- 3. State aid only applies in limited cases involving trade between Europe and Northern Ireland or in surviving multiannual projects between the UK and the EU, neither which is the case here.