Norfolk ZEBRA Scheme
Financial Case
January 2022

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First EasternCounties

Transport for Norwich

Norfolk County Council

FINANCIAL CASE

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1 Executive Summary

1.1.1 This is the Financial Case for the Norfolk County Council (NCC) ZEBRA funding submission which describes the affordability of the proposal and funding arrangements.

1.1.2 The total scheme cost is **£6,888,444** broken down as follows:

- Zero emission buses - REDACTED (15 vehicles),
- Infrastructure to support the zero emission bus operation - REDACTED,
- REDACTED
- REDACTED warranty[1],
- Existing diesel bus costs (used in the calculation of the ZEBRA grant) are £2,535,000 in total (£169,000 per vehicle)

1.1.3 The project will be funded from the following sources:

- DfT investment of £3,265,083
- First Group investment of £3,623,361
- These total **£6,888,444**

1.1.4 **Table 1** below provides more detail of the funding profile.

[1] It is noted that REDACTED.

TABLE 1: FUNDING PROFILE

Category	2022	2023	2024	Total
DfT investment (ZEBs)	Not applicable	REDACTED	REDACTED	£2,261,250
DfT investment (infrastructure)	REDACTED	REDACTED	Not applicable	£1,003,833
Total DfT investment	**£953,641**	**£1,557,692**	**£753,750**	**£3,265,083**
First Group investment (ZEBs)	Not applicable	REDACTED	REDACTED	£3,288,750
First Group investment (infrastructure)	REDACTED	REDACTED	Not applicable	£334,611
Total First Group investment	**£317,880**	**£2,209,231**	**£1,096,250**	**£3,623,361**
Total Cost	**£1,271,522**	**£3,766,922**	**£1,850,000**	**£6,888,444**

Overview of assessment of financial risk

1.1.5 A summary of the key financial risks / risks associated with uncertainty are described below (risks are covered in more detail in later sections and also in the Risk Management section of the Management Case):

- There is a risk that the cost of the zero emission buses from the supplier could increase prior to securing the ZEBRA funding. The cost to switch to an alternative ZEB supplier is estimated to be in the range of REDACTED. This risk is scored as a 4 (2 for likelihood and 2 for severity, out of 25), so the risk impact is considered to be low.
- REDACTED.
- There is also a risk that the quotations for power connection costs could increase as they are only valid for a fixed time period. This risk, (Ref 6), is scored as a 6 (2 for likelihood, and 3 for impact), and is deemed to be a medium category risk.
- There is a risk that the ongoing operating and maintenance costs for the electric buses exceed current estimates. This risk, (Ref 13),

is scored as a 6 (3 likelihood, 2 for severity), and is considered to fall within the medium risk category.

- The cost estimates are still subject to completion of the procurement process therefore the exact costs are subject to contractual agreements which will occur at the point of funding award.

1.1.6 Contingency of £131,584 within the projects costs has been applied to the depot power upgrade / infrastructure costs. (Contingency has only been applied to this element of the costs as this the most likely cost to vary – all other costs have been fixed by quotation. This is deemed to be an appropriate level of cost adjustment.

1.1.7 As First Bus is meeting around 53% of the total costs of the project, there is significant incentive for them to manage financial risk.

1.1.8 NCC will oversee the delivery of the ZEBRA project and as the ZEBRA grant administrator, will review evidence of all costs incurred as a condition of grant funding. Any savings on costs shown in this Financial Case will result in a matched grant saving, not be drawn down from DfT or be returned should draw-down already have occurred.

<u>Summary of long-term viability</u>

1.1.9 The scheme is considered to be viable in the long term as whole life (operating and maintenance) costs are lower than existing whole life costs (which utilise diesel vehicles) (see Section 1.6).

1.2 Project Summary

The financial summary of the ZEBRA project is provided below.

<u>Cost Profile</u>

1.2.1 The costs for implementation of the ZEBRA project comprise the purchase of the zero emission buses and upgrade of the associated power supply (including cabling and chargers), vehicle charging infrastructure and all professional fees. The costs are shown in **Table 2**.

TABLE 2: COST PROFILE (IN £)

Category	2022	2023	2024	Total
Electric Bus Delivery (vehicles)	REDACTED	REDACTED	REDACTED	REDACTED
Bus Cost	REDACTED	REDACTED	REDACTED	REDACTED
Infrastructure Cost	REDACTED	REDACTED	REDACTED	REDACTED
Total Cost	**£1,271,522**	**£3,766,922**	**£1,850,000**	**£6,888,444**

1.2.2 The infrastructure costs are further disaggregated as follows:

- REDACTED.
- REDACTED.
- REDACTED.
- REDACTED.
- Total infrastructure costs **£1,338,444**

1.2.3 The Electric Bus Costs are REDACTED for 15 buses.

1.2.4 The cost profile as a matrix of expenditure, by year and quarter, as a percentage, is shown in **Table 3** below. The costs are apportioned based on the likely spending profile after orders are placed.

TABLE 3: INDICATIVE COST PROFILE (%S)

Year	2022	2022	2022	2022	2023	2023	2023	2023	2024
Category	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Vehicles:	No data	No data	No data	No data	No data	No data	No data	No data	No data
Zero emission bus delivery	No data	No data	No data	No data	No data	No data	16.6%	66.6%	16.6%
Infrastructure Provision:	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Electricity - New Power Supply	No data	No data	75%	25%	No data	No data	No data	No data	No data
Electricity - Cabling/ Civils	No data	No data	50%	45%	5%	No data	No data	No data	No data
Electricity - Chargers	No data	No data	No data	100%	No data	No data	No data	No data	No data

1.2.5 Funding will be provided by First Bus and DfT. The profile of investment is provided in **Table 4** below:

TABLE 4: FUNDING PROFILE

This table has been redacted.

1.3 Whole Life Costs

1.3.1 The operating costs and maintenance costs for the project are summarised as follows:

- REDACTED
- REDACTED
- REDACTED
- REDACTED
- REDACTED

<u>Evidence of costs</u>

1.3.2 REDACTED

1.3.3 REDACTED

TABLE 5: GRANT CONTRIBUTION TO ELECTRIC VEHICLE PURCHASE

This table has been redacted.

1.3.4 REDACTED

1.3.5 REDACTED.

Support of stakeholders and customers

1.3.6 **Appendix provides** letters of support from key stakeholders in the project.

1.4 Changes since expression of interest stage

1.4.1 This section documents the changes in the project costs since the submission of the Expression of Interest (EOI) stage.

1.4.2 The EOI and latest cost estimates are shown in Table 6: Change in OVERALL Cost Estimates. The estimated cost of the zero emission buses has changed from REDACTED in the EOI to REDACTED in this FBC. This increase is 5.06% and in line with the inflation assumptions specified for the infrastructure (see below) and current UK inflation rates.

1.4.3 **Table 6**. There has been a small 0.5% increase in overall costs. The grant cost has increased by 0.8%.

1.4.4 The increase in costs is a result of increased cost certainty / maturity associated with the civil engineering / infrastructure costs within this bid. Costs were only estimates within the EOI, which have been replaced with a more detailed / accurate quotation provided by the supplier in this Full Business Case.

1.4.5 One cost item that has reduced since the EOI is related to the grid connection costs which First will need to pay to the DNO. At EOI stage the DNO quote was £750,000, whereas at FBC stage this cost has reduced to REDACTED apply for OFGEM Green Recovery Funding, the application of which was successful. The Green Recovery Fund's purpose is to help accelerate 'shovel-ready' green projects in an area, providing DNOs with additional funding to develop their power networks / increase their low carbon capacity. The additional capacity in the network will benefit First Bus, via a reduced cost (through access to a closer power supply than was anticipated at EOI stage), but it will also benefit all businesses and sectors wishing to connect to the enhanced infrastructure. As the DNO's bid was successful, and will go ahead regardless of the ZEBRA project, and because it will benefit a range of businesses and sectors, it is not considered to be part of this project, therefore the reduced costs are not considered to be grant funding in the same way as DfT grant funding (within either the economic appraisal, or the affordability assessment). The reduced costs for First and the DfT are just treated in the same way as reduced costs for the purchase or any other service or asset.

1.4.6 The estimated cost of the zero emission buses has changed from REDACTED. This increase is 5.06% and in line with the inflation assumptions specified for the infrastructure (see below) and current UK inflation rates.

TABLE 6: CHANGE IN OVERALL COST ESTIMATES

Cost	EoI	Financial Case
Total DfT Funding sought (£m)	£3,239,325	REDACTED
Third Party Funding (First Group) (£m)	£3,614,775	REDACTED
Total	**£6,854,100**	**£6,888,444**

1.4.7 A breakdown of the change to the infrastructure and electricity supply upgrade costs is provided below.

TABLE 7: CHANGE IN COST ESTIMATES (NON-ZERO EMISSION BUS)

Cost	EoI	Financial Case
DNO	£750,000	REDACTED
Civil Engineering Costs and professional fees	£442,000	REDACTED
Chargers	£350,000	REDACTED
Inflation (at 5%)	£77,100	
Total	**£1,619,100**	**£1,338,444**

1.5 Funding Profile

1.5.1 A more detailed funding profile has been produced using the ZEBRA Funding Profile Template and is set out in **Figure 1**.

1.5.2 REDACTED

1.5.3 Ongoing maintenance of infrastructure and the extended warranty is being funded privately.

1.5.4 The infrastructure funding line includes contingency of 20% applied as an uplift to the civil engineering works.

1.5.5 The funding sources for each cost line are as follows:

- Buses will be funded by ZEBRA and private funding by First Bus,
- Infrastructure cost line will be funded by ZEBRA and private funding by First Bus.

1.5.6 First Bus as the private funder of the project costs not covered by the ZEBRA grant accepts financial responsibility for the project going forward and accepts that cost risk increases will not be met by an increase in grant.

1.5.7 NCC, the Local Transport Authority (LTA), will not provide any budgetary contribution to this ZEBRA project. However, NCCs Section 151 Officer will be responsible for the release of grant funding, as discussed in the Management and Commercial Cases.

Norfolk County Council

FIGURE 1: ZEBRA FUNDING PROFILE

This figure has been redacted.

1.6 Long Term Financial Viability

1.6.1 The table below provides a comparison of the cost to operate the fleet of electric buses.

TABLE 8: COST COMPARISON DIESEL VS ELECTRIC (£000 P.A.)

This table has been redacted.

1.6.2 As these costs indicate, the cost to operate and maintain an electric vehicle fleet are cheaper than the costs to operate a diesel fleet of buses, therefore the scheme is determined to be affordable and viable from a long-term perspective.

1.6.3 Contributory reasons for the reduced operating costs for the electric buses compared to their diesel counterparts are because:

- Electric vehicle running costs are cheaper than diesel running costs,
- The change in BSOG rate to 22p per mile.

1.6.4 First Bus will be responsible for operating and maintenance costs of the electric buses and associated infrastructure for the lifetime of the project.

Statement of responsibility and ownership of cost projections

1.6.5 NCC as the LTA, and First Bus as the bus operator and private funder of the ZEBs and infrastructure, accept full responsibility for estimating and controlling all project costs.

Statement regarding ownership of risk / cost increase

1.6.6 First Bus acknowledges that any increases in cost on the project will not be met by an increase in grant (from DfT). **Appendix** includes First Bus's Letter of Support including a statement to this effect.

Assessment of Financial Risk / Risk Management Strategy

1.6.7 The key risks to the project are described in detail within the risk management section of the Management Case. Financial risks and risks related to uncertainty around costs are considered in below.

1.6.8 There is a risk that the cost of the zero emission buses could increase prior to securing the ZEBRA funding – especially given the current rate of inflation. First Bus are in negotiation with the supplier on all aspects of the bus specification and have so far agreed a fixed sum for the purchase of the buses. The management case only scores this risk as a 4 (2 for likelihood and 2 for severity) out of a possible 25, so the risk impact is considered to be low.

1.6.9 REDACTED).

1.6.10 The cost to switch to an alternative zero emission bus supplier is estimated to be in the range of REDACTED. This risk is scored as a 4 (2 for likelihood and 2 for severity, out of 25), so the risk impact is considered to be low.

1.6.11 There is also a risk that the quotations for power connection costs could increase as they are only valid for a fixed time period. REDACTED. Should the quote lapse and a firm decision has not been made on funding and/or whether to continue with the upgrade, the opportunity to proceed may be lost as another user may take up some of the available required power. First Bus are engaging with the Distribution Network Operator (DNO) regularly to appraise them of the current programme and are trying to secure an extension with no further cost increase. This risk is scored as a 6 (2 for likelihood, and 3 for impact), and is deemed to be a medium category risk.

1.6.12 The final financial risk captured is related to the ongoing operating and maintenance costs for the electric buses being significantly higher than estimated. Such costs will be closely monitored, and mitigation plans developed. This risk is scored as a 6 (3 likelihood, 2 for severity), and is considered to fall within the medium risk category.

Contingency

1.6.13 Contingency of £131,584 has been applied to the depot power upgrade / infrastructure costs. This is a 20% uplift of the total of the costs (£657,922.89), which is a simplistic form of risk cost-adjustment. Contingency has only been applied to the civil infrastructure work as those cost have the greatest likelihood of varying. This is deemed to be an appropriate level of cost adjustment, as other costs, such as those associated with the purchase of buses and those with the DNO will be fixed at the point of award, subject to a contract.

Risk of Cost Increases

1.6.14 As described within the Commercial Case, any risks that materialise and translate into a cost increase will be borne by First Bus and or NCC. Both parties acknowledge that the DfT grant will remain fixed and agreed at the point of award.

1.6.15 Additionally, as First Bus will be meeting around 53% of the total costs of the project, it has a significant incentive to manage and mitigate financial risks.

1.6.16 NCC, as the delivery partner, will oversee the delivery of the ZEBRA project. As the ZEBRA grant administrator, NCC will review evidence of all costs incurred as a condition of grant funding. Any savings on costs shown in this Financial Case will result in a matched grant saving which will not be drawn down from DfT or returned should draw-down already have occurred.

1.6.17 Grant will be released in stages in line with the project's procurement contracts. The grant drawn down process is described in more detail in the Commercial and Management Cases.

1.6.18 The cost estimates are still subject to completion of procurement with the exact costs subject to contractual agreements. These will be agreed following funding announcement / grant approval with DfT.

2 Legal Advice

2.1.1 A note from our lawyers has been produced to consider whether the grant will be applied in accordance with relevant subsidy control measures. This is attached as an Annex to this document. It shows that there are strong arguments that any potential subsidy offered to First Bus would satisfy the principles set out in the EU-UK Trade and Cooperation Agreement and therefore it would be a lawful award.

2.1.2 Full details of the legal advice sought can be found in the Annex of this business case.

3 Annex

3.1.1 All Appendices can be found in a separate Appendices document

3.1.2 Zebra Subsidy Advice found below.

Legal Advice

Zero Emission Bus Regional Area (ZEBRA) Electric Bus Funding

Norfolk County Council ("the Council") is preparing an application to the Department for Transport (DfT) in respect of their ZEBRA Electric Bus Funding. The bid would be used to assist in the purchase of 15 zero emission electric buses which will be owned and supported by investment from First Bus. In addition, this bid would be used to assist in the purchase of electric charging points for the buses to plug into and an upgrade to the electrical power supply. The Council would not invest any of its own capital in these buses, nor will they be used for non-commercial routes ("the Bid").

nplaw has been asked to consider the subsidy control rules for the purposes of the Bid, and it is understood that this note will form part of the Council's application.

Background

The Council is keen to see bus service improvements within its administrative area, not only to improve the user experience, but also but also to assist with meeting its own environmental policies and clean air strategy. This Bid, if successful, will assist with those short, medium and long term objectives.

The Council is aware that the grant funding conditions are that DfT would pay 75% of the difference between the diesel and electric bus prices and 75% of the total cost of any associated charging infrastructure, including ancillary works in relation to the power upgrade and civils. For this Bid, the other 25% will be invested directly by First Bus.

The electric buses will replace diesel buses that are already in operation on a like for like basis. Whilst there may be savings in bus fleet operational costs in the long term for First Bus, this does represent a significant up-front investment.

The Council is required to make the Bid, with support from relevant bus operators. Prior to choosing to progress with First Bus as its sole partner, the Council contacted all bus operators to gauge appetite for the project. Only First Bus were interested on the basis that they could afford the financial investment that would be required, and therefore they were the only ones included in the Bid. Had other bus operators been in a position to be included in the Bid, a bigger application to accommodate all would have been put forward.

First Bus will procure all the goods, works and services it requires to get and keep the electric buses into circulation, and fulfil its obligations in the Bid and any grant agreement to be agreed between it and the Council.

Legal Framework

Following the end of the Brexit transition, from 1 January 2021, a new subsidy control framework replaced the EU State Aid regime that previously applied in the UK. This takes into account the UK's obligations under free trade agreements, the Northern Irish Protocol, the UK's WTO membership and the EU-UK Trade and Cooperation Agreement ("the TCA"). The latter being relevant to, and the focus of, this note.

The TCA sets out a test for whether a subsidy exists by reference to four limbs:

*it arises from the resources of the parties [to the TCA];

*it confers an economic advantage on one or more economic actors;

*it is specific insofar as it benefits, certain economic actors over others in relation to the production of certain goods or services; and

*it has, or could have, an effect on trade or investment between the parties [to the TCA].

Where a subsidy is granted, it can still progress if it satisfies the six principles set out in Article 3.4 of the TCA ("the Principles"). If the Principles are not met, the subsidy may be challenged by any interested party, which would include competitors to an aided party. The Principles are as follows:

*the subsidy pursues a specific public policy objective to remedy an identified market failure or to address an equity rationale such as social difficulties or distributional concerns ("the objective");

*the subsidy is proportionate and limited to what is necessary to achieve the objective;

*the subsidy is designed to bring about a change of economic behaviour of the beneficiary that is conducive to achieving the objective and that would not be achieved in the absence of subsidies being provided;

*the subsidy should not normally compensate for the costs the beneficiary would have funded in the absence of any subsidy;

*the subsidy is an appropriate policy instrument to achieve a public policy objective and that objective cannot be achieved through other less distortive means; and *the subsidy's positive contributions to achieving the objective outweigh any negative effects, in particular the negative effects on trade or investment between the parties [to the TCA].

In applying the Principles, as they reflect the balancing tests used by the European Commission in assessing notified transactions and for the purposes of the State Aid exemptions under the EU regime, then it remains open to the Council to consider whether such a subsidy would have been compliant with one of the State Aid exemptions or would have been approved upon notification to the EU, as on that basis it is likely to be compliant with the Principles and therefore not vulnerable to a successful challenge. However, it is also possible to simply apply the Principles, as there is not a requirement that there needs to be direct compliance with an existing EU exemption.

It is expected that UK government will introduce a more express subsidy control regime in compliance with the TCA in due course, and therefore where more specific rules are introduced, it may be necessary for the Council to revisit this advice to ensure that there is compliance with that regime, as it evolves.

Application to the Bid

It is necessary to consider all potential beneficiaries of the funding, whether directly or indirectly, to ascertain whether a subsidy is being given. From the papers provided, they are:

(a) the Council;
(b) First Bus;
(c) any contractor employed by First Bus; and
(d) end users.

Taking each in turn:

(a) The Council

The Council does not satisfy the test because it is not acting as an economic operator and it is receiving no advantage. It is simply a facilitator in the Bid and is in receipt of no subsidy itself.

(b) First Bus

It is recognised that funding will be provided by the Council, a public sector body, and is therefore ultimately derived from state resources.

Although First Bus will need to make significant investment itself, it may be argued that they also obtain an economic advantage as the funding will reduce the costs that they incur in purchasing zero emission buses and it will support the infrastructure and civils required for zero emission buses to operate.

Whilst the Council has engaged on some level with all bus operators in order to determine whether they wish to apply as part of the Bid, and therefore there is an opportunity for all operators to access this funding on an equivalent basis, there is still an argument that First Bus is materially benefitting over others.

Whilst there is no substantive guidance on what “effect on trade or investment between the parties” means, the equivalent limb of the EU State Aid regime was always assumed to potentially apply in such circumstances, the threshold being very low. It therefore cannot be ruled out that this limb is either satisfied or could be satisfied.

On the basis that the subsidy test could be met for the award to First Bus, we turn to consider the Principles. Full details and the Council's audit trail are attached at schedule 1 of this note. On the basis of the explanation provided, there is a strong argument that the Principles should be satisfied, making the subsidy consistent with the TCA.

(c) Contractors employed by First Bus

First Bus have advised the Council that they will competitively procure all contracts required to get and keep the electric buses into circulation, and fulfil its obligations in the Bid and any grant agreement (to be agreed between it and the Council). This includes any infrastructure and civil work.

Following on from paragraph 1 of (b) above, although any payment to those companies will have arisen (in whole or in part) from the resources of the Council, they will have received no economic advantage over their competitors due to the procurement conducted. As such, the test is not met and no subsidy is being given to this group.

(d) End Users

Limited benefits will be received by the end user, on a pass-through basis. However, the test is not satisfied as they are not acting as economic operators. No subsidy is therefore received by end users.

23 January 2022

Dispute Resolution and Governance Team, nplaw

Schedule 1
Principles

Principle 1

The subsidy pursues a specific public policy objective to remedy an identified market failure or to address an equity rationale such as social difficulties or distributional concerns ("the objective").

The Council has an environmental policy that sets out the areas that it sees as key to protecting and maintaining the health of Norfolk's distinctive environment and its occupants. An important goal that frames this policy is the provision of "clean air for the population" through the policy aim of supporting alternatives to car travel, including promoting sustainable public transport (all together "the Environmental Policy").

Furthermore, the Council has recently reviewed its Local Transport Plan ("the LTP"), which outlines the Council's strategy and policy framework for transport and is used as a guide for investment priorities. The LTP covers the period 2020-2036 and was adopted in November 2021. It includes a commitment to carbon reduction in line with the adopted targets in the Environmental Policy as well as air quality improvements. The strategy is that these objectives will be achieved through measures including reducing the need for people to travel, a shift towards active travel and public transport, and through a shift towards cleaner fuels such as electric vehicles.

The Council has also recently reviewed its Transport for Norwich Strategy and an update to this was adopted in December 2021. This sets out long-term policy commitments to tackle decarbonisation, air quality, promoting active travel and supporting planned growth.

This Bid is therefore fully consistent with the delivery of the Council's stated public policy objectives.

Principle 2

The subsidy is proportionate and limited to what is necessary to achieve the objective.

The subsidy is directly aimed at supporting the local public policy objectives described against principle 1, including providing clean air, reducing carbon and encouraging a shift towards greater use of public transport.

The subsidy is considered to be proportionate and limited to what is necessary to achieve the objective because the level of investment is insufficient to enable all buses to be zero emission, but will provide a springboard for further investment in the future.

Principle 3

The subsidy is designed to bring about a change of economic behaviour of the beneficiary that is conducive to achieving the objective and that would not be achieved in the absence of subsidies being provided.

The subsidy enables First Bus to invest in 15 zero emission vehicles and supporting infrastructure. Without the subsidy, investment from the beneficiary would only enable a small number of vehicles to be supported and a poor return on investment, which would likely result in no investment being made at all.

An absence of subsidy would lead to the local policy objectives not being met as no impact would be made on reducing carbon emissions, improving air quality or encouraging greater use of public transport.

Principle 4
The subsidy should not normally compensate for the costs the beneficiary would have funded in the absence of any subsidy.

In the absence of any subsidy, no funding from First Bus would have come forward.

Principle 5
The subsidy is an appropriate policy instrument to achieve a public policy objective and that objective cannot be achieved through other less distortive means.

To achieve the public policy objectives of reducing carbon, improving air quality and encouraging greater use of public transport, investment is needed in the public transport fleet in Norwich to bring in higher-quality, zero emission buses.

Buses are operated commercially by private bus operators (with no local authority service contracts) and subsidy support is needed, in conjunction with private bus operator investment, to meet the high, upfront costs of buying zero emission buses. Without this, the required vehicles will not be obtained and operated in Norwich and local public policy objectives would not be achieved.

Buses are operated commercially by private bus operators (with no local authority service contracts) and subsidy support is needed, in conjunction with private bus operator investment, to meet the high, upfront costs of buying zero emission buses. Without this, the required vehicles will not be obtained and operated in Norwich and local public policy objectives would not be achieved.

Principle 6
The subsidy's positive contributions to achieving the objective outweigh any negative effects, in particular the negative effects on trade or investment between the parties [to the TCA].

The levels of subsidy investment outlined in this Bid are not significant and all bus operators have been encouraged to participate. The negative effects on the parties to the TCA are a potential at best and therefore the Council considers that the positive contributions to achieving the objective, which will have a real-term effect, do outweigh them.

4 Glossary of Abbreviations and Defined Terms

- **AQAP -** Air Quality Action Plan
- **AQMA -** Air Quality Management Area
- **BCR -** Benefit Cost Ratio
- **BEV -** Battery Electric vehicle
- **BID -** Business Improvement District
- **BSIP -** Bus Service Improvement Plan
- **BSOG -** Bus Service Operator Grant
- **CO2 -** Carbon Dioxide
- **CSS -** Combined Charging System
- **CYC -** City of York Council
- **DEFRA -** Department for Environment, Food and Rural Affairs
- **DfT -** Department for Transport
- **DNO -** Distribution Network Operator
- **EOI -** Expression of Interest
- **EQIA -** Equality Impact Assessment
- **EV -** Electric Vehicle
- **GBT -** Greener Bus Tool
- **GDP -** Gross Domestic Product
- **GJT -** Generalised Journey Time
- **GNR -** Greater Norwich Region
- **ICE -** Internal Combustion Engine
- **ITT -** Invitation to Tender
- **JCS -** Joint Core Strategy
- **LED -** Light-Emitting Diode
- **LEP -** Local Enterprise Partnership

- **LEZ -** Low Emission Zone
- **LTA -** Local Transport Authority
- **LTP -** Local Transport Plan
- **M&E -** Monitoring and Evaluation
- **NBS -** National Bus Strategy
- **NCC -** Norfolk County Council
- **NNUH -** Norfolk and Norwich University Hospital
- **NO2 -** Nitrogen Dioxide
- **NOx -** Oxides of Nitrogen
- **NRP -** Norwich Research Park
- **NSIDP -** Norfolk Strategic Infrastructure Delivery Plan
- **OEM -** Original Equipment Manufacturer
- **OfGEM -** Office of Gas and Electricity Markets
- **ONS -** Office of National Statistics
- **PIPs -** Punctuality Improvement Partnerships
- **PM10 -** Particulate Matter
- **PM2.5 -** Particulate Matter to 2.5 microns
- **PSVAR -** Public Service Vehicles Accessibility Regulations
- **PVB -** Present Value of Benefits
- **PVR -** Peak Vehicle Requirement
- **R&D -** Research and Development
- **SCRT -** Selective Catalytic Reduction Technology
- **SLA -** Service Level Agreement
- **SRO -** Senior Responsible Owner
- **SSE -** Scottish and Southern Elect
- **TAG -** Transport Analysis Guidance

- **TCA -** Trade Cooperation Agreement
- **TCF -** Transforming Cities Fund
- **TfN -** Transport for Norwich
- **ToR-** Terms of Reference
- **UEA -** University of East Anglia
- **UKPN -** UK Power Networks
- **VfM -** Value for Money
- **VQP -** Voluntary Quality Partnership
- **WHO -** World Health Organisation
- **ZEB -** Zero Emission Bus
- **ZEBs -** Zero Emission Buses