

**North Yorkshire County Council**

**Business and Environmental Services**

**Executive Members**

**21 January 2022**

**Department for Transport Zero Emission Bus Regional Areas Scheme – Business Case Submission**

**This report contains information of the type defined in paragraph 3(s) of Part 1 of Schedule 12A Local Government Act 1972 (as amended).**

**Report of the Assistant Director – Travel, Environmental and Countryside Services**

**1.0 Purpose Of Report**

- 1.1 To update the Corporate Director, Business and Environmental Services (BES) and BES Executive Members on the Department for Transport Zero Emission Bus Regional Areas Scheme.
- 1.2 Following consultation with the Corporate Director, Business and Environmental Services and the Corporate Director Strategic Resources to seek authorisation from Councillor Mackenzie the Executive Member for Access for the submission of the Business Case at Appendix 1 to the Department for Transport Zero Emission Bus Regional Areas Scheme, together with authorising the Corporate Director Strategic Resources to accept the funding should the bids be successful, subject to acceptable grant terms and conditions and memorandum of understanding being received.

**2.0 Background**

- 2.1 In March 2021 the Department for Transport (DfT) announced the Zero Emission Regional Areas Scheme (ZEBRA). The DfT stated the scheme would be a place-based scheme that would allow areas, led by local transport authorities, working in close partnership with bus operators or as consortia with more stakeholders, to bid for funding to purchase zero emission buses (ZEBs) and the infrastructure needed to support them.
- 2.2 The DfT ZEBRA objectives:
- To support the government’s commitment to decarbonisation and to reduce the transport sector’s contribution to CO<sub>2</sub> emissions.
  - To support the roll-out of the 4,000 Zero Emission Buses that the government committed to in February 2020.
  - To support bus manufacturers in the development of zero emission bus technology.
  - To support partnership working between Local Transport Authorities, bus operators, and other local stakeholders as set out in the National Bus Strategy.
  - To understand better the challenges of introducing zero emission buses and supporting infrastructure to inform future government support for Zero Emission Buses.

- 2.3 The scheme is a two-stage competition:
- Phase 1: An Expression of Interest (EOI) stage where DfT assess the places that show the most potential
  - Phase 2: A business case development stage where areas will be assessed in more detail for potential funding support.
- 2.4 Local transport authorities could choose whether they want to follow a fast-track application process or a standard application process.
- 2.5 An indicative timetable was also provided as follows:

Stage	Standard	Fast-track
Phase 1 – EOI's submitted	29 March 2021 – 25 June 2021	29 March – 21 May 2021
Review and confirmation of areas progressing	June 2021 – July 2021	May- June 2021
Phase 2 – Business Case development	August 2021 – January 2022	June- July 2021
Review and select winners	By February 2022	August 2021
Successful schemes begin to deliver	By March 2022	September 2021

- 2.6 The county council submitted an Expression of Interest to the Fast-track process but unfortunately this was not successful. An Expression of Interest was subsequently submitted to the Standard process and on 27 July 2021 confirmation was received from DfT that the county council had been successful in being shortlisted to Phase 2 Business Case development.

### 3.0 Consultation and Application Proposals

- 3.1 During March 2021 North Yorkshire County Council commissioned consultants to investigate and understand the county's local bus operator's preparedness for transitioning to zero emission bus fleets. The six largest operators, representing approximately 95% of the public transport network in North Yorkshire, were notified of commissioned work and were asked to take part in a consultation meeting to share their fleet renewal plans, their understanding of ZEB technology and any particular challenges or obstacles they could foresee in the deployment of ZEB in their fleets.
- 3.2 After announcement of the DfT ZEBRA programme and funding opportunity the council contacted all local bus service operators in the county, over 20 in total, notifying them of the funding opportunity and asking them to let the council know if they had interest in submitting the required operator information for inclusion in an Expression of Interest submission. A handful of operator responses were received but none were suitable for taking forward into a final submission. Reasons including submitting requests to include minibuses, which the guidance confirmed would not be accepted and just requesting funding but being unable to provide any further details such as infrastructure requirements and evidence requirements of the scheme such as engagement with an energy company.
- 3.3 As part of regular dialogue with operators, the council was already aware of one operator's ambitions to transition their fleet to 100% ZEBs. In addition, early discussions with another operator indicated they were advancing their plans to commence introducing ZEBs into their fleet but that they are planning to transfer to a new depot location in the foreseeable future.

- 3.4 After careful consideration of all the information and taking into consideration:
- The objectives of the ZEBRA scheme
  - The presence of four Air Quality Management Areas in Harrogate and Knaresborough, of which bus emissions contribute to the source apportionment in all four areas
  - North Yorkshire's zero emission bus roadmap which forms part of North Yorkshire Bus Service Improvement Plan
  - Operators ability to meet the operator / third party funding requirements of the ZEBRA scheme

3.4.1 The preferred option for inclusion in the business case submission was to submit proposals to transition 100% of Transdev's Harrogate fleet to zero emission vehicles along with required supporting infrastructure.

3.5 The full business case is available at Appendix 1. It should be noted that the business case may require some further amendments such as refinement and / enhancement of the text etc to further improve the quality of the document, along with final formatting and design/layout of the document.

#### **4.0 Equalities**

4.1 Consideration of the impact on groups of people with protected characteristics has been considered. In summary, whilst the identified impacts are positive for a number of groups of people with protected characteristics, one potential negative impact has been identified. As electric vehicles are quieter than combustion engine alternatives, there is the potential for an adverse impact to blind and partially sighted people.

4.2 The project is likely to deliver a number of positive impacts to a number of groups of people with protected characteristics. The council will work local bus operators that already operate such vehicles to identify if the potential adverse impact identified is likely to materialise and if so the council will work with the preferred bus operator partner to identify evaluate the benefits of interventions to address this adverse impact, for example including artificial bus noise on the vehicles.

4.3 A full equalities impact assessment is available within the Business Case at Appendix 2.

#### **5.0 Finance**

5.1 Full financial details are included in Appendix 1.

5.2 The total proposal costs are £20,337,300 with DfT ZEBRA funding sought for £7,925,111. Third party funding contribution of £12,412,190 is secured to support the proposal.

5.3 The council is not providing a funding contribution to the proposal. The council does not bear the risk for any increased costs or any ongoing maintenance costs. As such there is no impact on revenue budgets, other than the legal advice as detailed at point 5.4.

5.4 The council has sought external legal advice as required by the DfT ZEBRA guidelines. The total costs incurred as at 6 January 2022 are £1,479.00 (excl VAT). Should there be any further external legal advice required before business case submission this is not expected to exceed £750.00. Costs to date and any future costs will be funded from the existing IPT revenue budget.

- 5.5 There will also be staff resources associated with delivery of the proposal. The following cost categories exist for North Yorkshire County Council during delivery of the proposal:
- Project management and administration, including monitoring and evaluation
  - Financial oversight
  - Other professional and technical support
  - Communication / Marketing
- 5.6 Forecast resource planning estimates over the project delivery lifespan are as follows:
- BES 2.5 days per month
  - Finance 2 days per quarter
  - Legal 4 days (total)
  - Comms 3.5 days (total)
- 5.6.1 Given the minimal staff resource no additional staff are required and work will be managed through existing staff. As such there will be no additional costs to salary budgets.
- 5.7 The council has not yet received from the Department for Transport any Memorandum of Understanding or grant funding conditions. The acceptance of any funding will be subject to these conditions being acceptable to the council.

## **6.0 Legal**

- 6.1 Consideration has been given to the potential for any legal implications arising from the recommendations of this report. It is a requirement of the DfT ZEBRA Standard Track – Supplementary Guidance that Local Transport Authority’s business cases should:
- Confirm that they have received external legal advice on their business case proposal
  - Demonstrate how the proposal will abide by procurement, state aid and subsidy regimes
  - Outline clearly how the scheme satisfies the principles under the Trade and Cooperation Agreement.
- 6.2 External legal advice has been sought from Freeths LLP. Their full advice is available at Commercial Case Annex 2 of the Business Case. In summary:
- 6.3 As a general proposition, the making available of Grant Funding is not generally regarded as a Public Procurement.
- 6.4 The Public Contract Regulations 2015 requirements are not directly relevant in this context. We anticipate a Grant Funding Agreement will be put in place to protect public monies and allow for potential “clawback” if Grant monies were not spent in accordance with agreed conditions and requirements.
- 6.5 More significantly, consideration needs to be given to the grant in terms of what was formerly known as “state aid” (now commonly referred to as “Subsidy Control”) given that state resources in the form of a grant are being granted to an “economic operator” which may distort competition. Subsidy Control rules are now provided for in the Trade and Competition Agreement (TCA).

6.6 External legal advice is such that the grant could fall within the category of “*general infrastructure*” which is generally not to be regarded as “*State Aid*” (now, more properly “*subsidy*”) at all given that the funding is targeted at improving public transport. However, even if this funding was not categorised within the “general infrastructure exemption” external advice is that the funding is likely to be lawful as it satisfies the “Common Principles” provided for in the TCA (for example it satisfies a “public policy objective” and is “proportionate.”

## **7.0 Climate Change**

7.1 A Climate Change Impact Assessment has been completed and this is attached at Appendix 3.

7.2 It is not anticipated that this proposal impact emissions from construction, running of buildings and other. It is not anticipated that this proposal will minimise waste or reduce water consumption. It is not anticipated this proposal will impact resilience to the effects of climate change or will enhance conservation and wildlife or safeguard the distinctive characteristics, features and special qualities of North Yorkshire’s landscape.

7.3 The proposal will have a positive impact and emissions from travel and will replace 39 diesel engine vehicles with battery electric vehicles on a one for one basis. The current carbon impact of each combustion vehicle to be replaced as part of this proposal is an average 1282g CO<sub>2</sub> per km compared to 438g per km for the battery electric vehicles. This positive impact will be ongoing over the life of the new vehicles. There will also be emission savings from road tanker diesel delivery as this will no longer be required.

7.4 The proposal will have a positive impact on the pollution. The current carbon impact of each combustion vehicle to be replaced as part of this proposal is an average 1282g CO<sub>2</sub> per km compared to 438g per km for the battery electric vehicles. This positive impact will be ongoing over the life of the new vehicles. There will also be emission savings from road tanker diesel delivery as this will no longer be required. As electric vehicles are quieter than combustion engine alternatives there will be a reduction in noise pollution.

## **8.0 Recommendations**

8.1 Following consultation with the Corporate Director, Business and Environmental Services, the Corporate Director Strategic Resources and the Assistant Chief Executive (Legal and Democratic Services) that Councillor Mackenzie the Executive Member for Access authorises any amendments to the business case to further improve the quality of the document as detailed at outlined at section 3.5.

8.2 Following consultation with the Corporate Director, Business and Environmental Services and the Corporate Director Strategic Resources that Councillor Mackenzie the Executive Member for Access authorises the submission of the Business Case at Appendix 1 to the Department for Transport Zero Emission Bus Regional Areas Scheme, together with authorising the Corporate Director Strategic Resources to accept the funding should the bids be successful (subject to acceptable grant funding conditions being received).

MICHAEL LEAH  
Assistant Director – Travel, Environmental and Countryside Services

Author of Report: Cathy Knight

Background Documents:

DfT ZEBRA 2021 to 2022 Call for Expressions of Interest

[DfT ZEBRA Business Case Development Guidance](#)

DfT ZEBRA Standard Track – Supplementary Guidance

## Equality impact assessment (EIA) form: evidencing paying due regard to protected characteristics

(Form updated April 2019)

### Zero Emission Buses Funding Area Funding Bid

If you would like this information in another language or format such as Braille, large print or audio, please contact the Communications Unit on 01609 53 2013 or email [communications@northyorks.gov.uk](mailto:communications@northyorks.gov.uk).



যদি আপনি এই ডকুমেন্ট অন্য ভাষায় বা ফরমেটে চান, তাহলে দয়া করে আমাদেরকে বলুন।  
如欲索取以另一語文印製或另一格式製作的資料，請與我們聯絡。  
اگر آپ کو معلومات کسی دیگر زبان یا دیگر شکل میں درکار ہوں تو برائے مہربانی ہم سے پوچھئے۔

**Equality Impact Assessments (EIAs) are public documents. EIAs accompanying reports going to County Councillors for decisions are published with the committee papers on our website and are available in hard copy at the relevant meeting. To help people to find completed EIAs we also publish them in the Equality and Diversity section of our website. This will help people to see for themselves how we have paid due regard in order to meet statutory requirements.**

Name of Directorate and Service Area	Business and Environmental Services Integrated Passenger Transport
Lead Officer and contact details	Cathy Knight <a href="mailto:cathy.knight@northyorks.gov.uk">cathy.knight@northyorks.gov.uk</a>
Names and roles of other people involved in carrying out the EIA	
How will you pay due regard? e.g. working group, individual officer	Officers will consider the council's equality duty and be mindful of the impact and potential effects of the proposal to people with any of the protected characteristics as defined by the Equality Act 2010, or North Yorkshire County Council's additional agreed characteristics throughout the delivery of the proposal lifecycle.

	Steps to mitigate any potential adverse impacts are set out in this assessment.
When did the due regard process start?	August 2021
<p><b>Section 1. Please describe briefly what this EIA is about.</b> (e.g. are you starting a new service, changing how you do something, stopping doing something?)</p> <p>North Yorkshire County Council is submitting a Business Case to the Department for Transport through the Zero Emission Bus Regional Area scheme to secure funding for new zero emission buses and supporting charging infrastructure in the Harrogate and Knaresborough area.</p>	

**Section 2. Why is this being proposed? What are the aims? What does the authority hope to achieve by it?** (e.g. to save money, meet increased demand, do things in a better way.)

Converting buses in the defined area to operation using zero emission buses will continue the transition to zero emission buses operating in the area and help develop best practice for use by other local bus service operators as they transition their fleet. There are a number of other benefits including:

Air Quality

With zero emission vehicles that produce zero tail pipe emissions this proposal will deliver air quality benefits, benefiting the environment and the general health of the North Yorkshire population.

Health

Improved air quality has associated improvements to the health and as such will lead to improvements in the general health local residents and of the North Yorkshire population and visitors who visit Harrogate and Knaresborough.

Environmental

Reduced noise pollution. This funding will and will deliver environmental benefits and accelerate the benefits of decarbonisation, benefiting the environment – in alignment with the North Yorkshire Draft Air Quality Strategy (2020).

Economic

Transdev has an established apprenticeship scheme which will now include training on electric vehicle maintenance. From 2021 the apprenticeship programme has evolved to cover both mechanical and electrical aspects with a particular focus on hybrid and zero emission technology.

All of the bus funding (£18,327,110) will be entirely retained within the county of North Yorkshire, a significant levelling up opportunity.

Social

The zero emission vehicles will offer a high standard of customer experience. They will be equipped with superfast 4G wifi, phone holders with USB and wireless power charging at every seat, reading lights, bigger bins with recycling facilities and additional wheel chair spaces. Buses will have audio visual next stop announcements with on board real time information and induction loops. Providing accessibility improvements.

Provision of a network of zero emission Transdev fleet across Harrogate and Knaresborough will support leisure and tourism, and encourage longer distance tourist trips into the region.

**Section 3. What will change? What will be different for customers and/or staff?**

- This bid will enable 39 new zero emission buses to be delivered, along with supporting charging infrastructure, to replace and redeploy 11 Euro 5 buses and 2 Euro 6 buses.
- There will be improvements in air quality and a reduction in roadside emissions.

- There will be transport user improvements from the high standard bus interiors and enhanced accessibility features, which exceed The Public Service Vehicles Accessibility Regulations 2000 requirements.

**Section 4. Involvement and consultation (What involvement and consultation has been done regarding the proposal and what are the results? What consultation will be needed and how will it be done?)**

The council will work local bus operators that already operate such vehicles to identify if the potential adverse impact identified is likely to materialise and if so the council will work with the preferred bus operator partner to identify evaluate the benefits of interventions to address this adverse impact, for example including artificial bus noise on the vehicles.

A full consultation and involvement process is not currently feasible, especially as clinically vulnerable groups may feel at risk in face to face engagement and some users can face challenges in digital access. Key stakeholders of groups representative of people with protected characteristics will be engaged with and informed of these proposals and seek their involvement in understanding more about the diverse preferences of stakeholders in relation to the proposal.

North Yorkshire County Council has carried out a level of stakeholder engagement to inform development of this BSIP, seeking the views of a number of organisations and individuals on their priority areas for intervention and desired outcomes. Stakeholders included:

- Bus and community transport operators
- Surrounding Local authorities
- North Yorkshire District councils
- North Yorkshire Parish Councils
- North Yorkshire Elected representatives
- NHS and Emergency services
- Business groups
- Voluntary sector organisations
- Bus user groups

The council also engaged with the North Yorkshire County Councils Citizens' panel, a group of 2,000 residents who share views and ideas to understand local priorities. This engagement found that the top priorities for bus users in North Yorkshire (and their representatives) are:

- More frequent services (ie hourly or better)
- More evening and Sunday services
- Simpler ticketing e.g. contactless card payment, flat fare, capped day travel ticket price
- Good value adult fares
- Clean, safe, accessible buses and waiting facilities

The engagement also highlighted the need for more widely available ticketing offers such as discounted travel for young people and group travel discount for two or more people travelling together; ticket acceptance by any operator on common routes; more availability of live bus information available on smart phone apps; faster and more punctual services; and more demand responsive services.

When asked about the factors that would influence the respondents to use bus services in North Yorkshire, or use them more often, better service reliability, better service frequency and more evening and Sunday services were the three most important factors cited. Live bus information available on a smart phones and clean, safe, accessible buses were also cited as important factors. Having a reliable consistent service throughout the day was also considered more important than having high frequencies at busy times such as 3-4 buses per hour. Bus lanes in locations where traffic congestion occurs was seen by respondents as more attractive than reduced on-street parking or making town centre parking more expensive.

**Section 5. What impact will this proposal have on council budgets? Will it be cost neutral, have increased cost or reduce costs?**

There are no financial impacts to North Yorkshire County Council other than officer staff time.

Section 6. How will this proposal affect people with protected characteristics?	No impact	Make things better	Make things worse	Why will it have this effect? Provide evidence from engagement, consultation and/or service user data or demographic information etc.
Age		x		<p><a href="#">Net Zero - The UK's contribution to stopping global warming - Climate Change Committee (theccc.org.uk)</a> Poorer and more vulnerable parts of society are expected to be more exposed to impacts from a number of climate risks. However, co-benefits such as reduced air pollution are likely disproportionately to favour low-income and vulnerable people, the former of whom tend to live in areas worst affected by air pollution. Increasing the number of zero emission buses will improve air quality.</p> <p>The buses will be fitted with a number of accessibility requirements (eg equipment identifying the route, each upcoming stop) which will assist older people and people with certain disabilities.</p> <p>Air pollution can adversely impact human development which can have both immediate and long-lasting effects on a person's health. Early childhood is a critical time for the formation and maturation of body systems and the time during which most rapid changes take place. . Increasing the number of zero emission buses will improve air quality.</p> <p><a href="#">Health matters: air pollution - GOV.UK (www.gov.uk)</a></p> <p>Of the 620,610 people living in North Yorkshire in 2020, 117,670 people (19.0%) were aged 0 to 17, 347,982 people (56.1%) were aged 18 to 64 and 154,958 people (25.0%) were aged 65 and over. <a href="#">LG Inform</a></p> <p>Older people are at higher risk of poverty which increases likelihood of bus trips – see information about socio economic circumstance and use of buses, eg In 2019, people in the lowest real income quintile made more local bus trips on average than any other income quintile, while those in the highest income quintile made the least. <a href="#">Annual Bus Statistics: England 2019/20</a></p>

Disability		x	x	<p>Poorer and more vulnerable parts of society are expected to be more exposed to impacts from a number of climate risks. However, co-benefits such as reduced air pollution are likely disproportionately to favour low-income and vulnerable people, the former of whom tend to live in areas worst affected by air pollution. Increasing the number of zero emission buses will improve air quality. <a href="https://theccc.org.uk">Net Zero - The UK's contribution to stopping global warming - Climate Change Committee (theccc.org.uk)</a></p> <p>The buses will be fitted with a number of accessibility requirements (eg equipment identifying the route, each upcoming stop) which will assist older people and people with certain disabilities.</p> <p>Whilst increasing the number of zero emission buses will improve noise pollution (which can result in heart problems, sleep disturbance, slower learning and annoyance, and can disrupt the natural environment), as electric vehicles are quieter than combustion engine alternatives, there is the potential for an adverse impact to blind and partially sighted people.</p> <p>The buses will have enhanced accessibility features.</p> <p>Long term health problems in North Yorkshire: 9.87% residents are “limited a little”; 7.46% “limited a lot” – see <a href="#">Data North Yorkshire</a>.</p> <p>People with a disability make fewer trips by car (<a href="#">Transport Statistics 2019</a>)</p>
Sex		x		<p>50.80% female, 49.20 % male in N Yorkshire – <a href="#">Data North Yorkshire</a></p> <p>Lone parents are predominantly female, which affects socio economic status and access to own car</p> <p>Higher proportion of female carers than male carers, so the additional buggy space/wheelchair space is particularly relevant.</p>
Race		x		<p>9.38% total resident population BAME in N Yorkshire - <a href="#">LG Inform</a></p> <p>BAME groups more frequently face socio economic disadvantage which can correlate with living in more densely populated areas where air quality is poor.</p>

Gender reassignment	x			Currently, there is no robust data about the number of trans people in the UK.  It is not anticipated that these proposals will differentially impact trans people.
Sexual orientation	x			Currently, there is no robust data about the number of LGB people in the UK. Stonewall estimate one in 10.  It is not anticipated that these proposals will differentially impact people on the grounds of their sexual orientation,
Religion or belief	x			<a href="#">Nomis Census Data</a> – In N Yorkshire: 69.4% Christian; 0.3% Buddhist; 0.2% Hindu; 0.1% Jewish; 0.4% Muslim; 0.0% Sikh; 0.3% Other religion; 22.2% No Religion.
Pregnancy or maternity		x		Air pollution can adversely impact human development which can have both immediate and long-lasting effects on a person's health. Air pollution has potential effects on foetal growth and exposure to air pollution is associated with low birth weight and premature birth. Increasing the number of zero emission buses will improve air pollution. <a href="#">Health matters: air pollution - GOV.UK (www.gov.uk)</a>  The buses will be fitted with a number of accessibility requirements (eg 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) which will assist bus users with pushchairs.
Marriage or civil partnership	x			No evidence of impact on grounds of marriage or civil partnership.

<b>Section 7. How will this proposal affect people who...</b>	<b>No impact</b>	<b>Make things better</b>	<b>Make things worse</b>	<b>Why will it have this effect? Provide evidence from engagement, consultation and/or service user data or demographic information etc.</b>
..live in a rural area?	x			No evidence of impact on grounds of people living in a rural area.
...have a low income?		x		Poorer and more vulnerable parts of society are expected to be more exposed to impacts from a number of climate risks. However, co-benefits such as reduced air pollution are likely disproportionately to favour low-income and vulnerable people, the former of whom tend to live in areas worst affected by air pollution. Increasing the number of zero emission buses will improve air quality. <a href="#">Net Zero - The UK's contribution to stopping global warming - Climate Change Committee (theccc.org.uk)</a>

...are carers (unpaid family or friend)?		x		Carers, such as parents of young children, are likely to benefit from the additional buggy space/wheelchair.
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**Section 8. Geographic impact – Please detail where the impact will be (please tick all that apply)**

North Yorkshire wide	
Craven district	
Hambleton district	
Harrogate district	x
Richmondshire district	
Ryedale district	
Scarborough district	
Selby district	

**If you have ticked one or more districts, will specific town(s)/village(s) be particularly impacted? If so, please specify below.**

The towns of Harrogate and Knaresborough in Harrogate borough in the main. The services within the proposal will also operate to West Yorkshire (Wetherby and Leeds) and to Ripon.

The following four services are part of the proposal for conversion to zero emission buses:

- The 1 between Harrogate and Knaresborough estates
- The 7 between Harrogate, Wetherby and Leeds
- The 24 between Harrogate and Pateley Bridge
- The 36 between Ripon, Harrogate and Leeds

**Section 9. Will the proposal affect anyone more because of a combination of protected characteristics? (e.g. older women or young gay men) State what you think the effect may be and why, providing evidence from engagement, consultation and/or service user data or demographic information etc.**

The following groups are likely to be positively impacted by the proposal:

- Older people on low income
- Young children living in a low income household
- People with a disability\* on low income
- Pregnant or maternity on low income
- Lone parents who are predominately female and at higher risk of poverty

\* Whilst impacts are in the main positive, there is the potential for an adverse impact to blind and partially sighted people as detailed above.

<b>Section 10. Next steps to address the anticipated impact. Select one of the following options and explain why this has been chosen. (Remember: we have an anticipatory duty to make reasonable adjustments so that disabled people can access services and work for us)</b>	<b>Tick option chosen</b>
<b>1. No adverse impact - no major change needed to the proposal.</b> There is no potential for discrimination or adverse impact identified.	x
<b>2. Adverse impact - adjust the proposal -</b> The EIA identifies potential problems or missed opportunities. We will change our proposal to reduce or remove these adverse impacts, or we will achieve our aim in another way which will not make things worse for people.	
<b>3. Adverse impact - continue the proposal -</b> The EIA identifies potential problems or missed opportunities. We cannot change our proposal to reduce or remove these adverse impacts, nor can we achieve our aim in another way which will not make things worse for people. (There must be compelling reasons for continuing with proposals which will have the most adverse impacts. Get advice from Legal Services)	
<b>4. Actual or potential unlawful discrimination - stop and remove the proposal –</b> The EIA identifies actual or potential unlawful discrimination. It must be stopped.	
<p><b>Explanation of why option has been chosen.</b> (Include any advice given by Legal Services.)</p> <p>The proposal is likely to have a positive impact on a number of groups of people with protected characteristics.</p> <ul style="list-style-type: none"> <li>• Improved air quality will reduce the adverse impact of air pollution:             <ul style="list-style-type: none"> <li>○ Young people’s development is affected by air pollution, which can have both immediate and long-lasting effects on a person’s health. Early childhood is a critical time for the formation and maturation of body systems and the time during which most rapid changes take place.</li> <li>○ Low-income and vulnerable people, the former of whom tend to live in areas worst affected by air pollution.</li> <li>○ Pregnancy/maternity air pollution has potential effects on foetal growth and exposure to air pollution is associated with low birth weight and premature birth.</li> </ul> </li> <li>• The buses will be fitted with a number of accessibility requirements (eg equipment identifying the route, each upcoming stop) which will assist older people, people with certain disabilities and parents who are carers for young people.</li> <li>• Improved noise pollution (which can result in heart problems, sleep disturbance, slower learning and annoyance, and can disrupt the natural environment).</li> <li>• The vehicles will have improved accessibility features including an additional wheelchair space.</li> </ul> <p>One potential negative impact is that as electric vehicles are quieter than combustion engine alternatives, there is the potential for an adverse impact to blind and partially sighted people. The council will work local bus operators that already operate such vehicles to identify if the potential adverse impact identified is likely to materialise and if so the council will work with the preferred bus operator partner to identify evaluate the benefits of interventions to address this adverse impact, for example including artificial bus noise on the vehicles. The council will also work with the partner bus operator to engage with users and representatives to monitor for signs and any adverse impact.</p>	

**Section 11. If the proposal is to be implemented, how will you find out how it is really affecting people? (How will you monitor and review the changes?)**

- Monitoring and evaluation will be embedded into the project programme.
- Current information systems will be used and monitored for example:
  - Correspondence and complaints following the introduction of any changes
  - Feedback from Parish Councils, County Councillors and other stakeholders such as disability user groups
- Monitoring patronage usage by user group
- Passenger satisfaction surveys

**Section 12. Action plan.** List any actions you need to take which have been identified in this EIA, including post implementation review to find out how the outcomes have been achieved in practice and what impacts there have actually been on people with protected characteristics.

Action	Lead	By when	Progress	Monitoring arrangements
Monitoring and evaluation plan	North Yorkshire County Council	Ongoing	Ongoing	As detailed in the plan
Monitor current information systems	North Yorkshire County Council / Operator	Ongoing	Ongoing	Through normal business processes
Monitor patronage usage by user group	Operator	Ongoing	Ongoing	Through normal business processes
Passenger satisfaction surveys	Operator	Ongoing	Ongoing	Through normal business processes

**Section 13. Summary** Summarise the findings of your EIA, including impacts, recommendation in relation to addressing impacts, including any legal advice, and next steps. This summary should be used as part of the report to the decision maker.

The Council is submitting a Business Case to the Department for Transport through the Zero Emission Bus Regional Area to secure funding for new zero emission buses and supporting charging infrastructure in the Harrogate and Knaresborough area. Funding received through this bid will enable 39 new zero emission buses to be delivered, along with supporting charging infrastructure, to replace and redeploy 11 Euro 5 buses and 2 Euro 6 buses.

There are a number of other benefits including:

- Air Quality
- Health
- Environmental
- Economic
- Social

Whilst the identified impacts are positive for a number of groups of people with protected characteristics, one potential negative impact has been identified. As electric vehicles are quieter than combustion engine alternatives, there is the potential for an adverse impact to blind and partially sighted people.

The proposal is likely to deliver a number of positive impacts to a number of groups of people with protected characteristics. The council will work local bus operators that already operate such vehicles to identify if the potential adverse impact identified is likely to materialise and if so the council

will work with the preferred bus operator partner to identify evaluate the benefits of interventions to address this adverse impact, for example including artificial bus noise on the vehicles.

**Section 14. Sign off section**

This full EIA was completed by:

**Name:** Cathy Knight

**Job title:** Commercial Sector Service Development Manager

**Directorate:** Business and Environmental Services

**Signature:**

**Completion date:** 26/08/2021

**Authorised by relevant Assistant Director (signature):**

**Date:**



## Climate change impact assessment

The purpose of this assessment is to help us understand the likely impacts of our decisions on the environment of North Yorkshire and on our aspiration to achieve net carbon neutrality by 2030, or as close to that date as possible. The intention is to mitigate negative effects and identify projects which will have positive effects.

This document should be completed in consultation with the supporting guidance. The final document will be published as part of the decision making process and should be written in Plain English.

If you have any additional queries which are not covered by the guidance please email [climatechange@northyorks.gov.uk](mailto:climatechange@northyorks.gov.uk)

**Please note: You may not need to undertake this assessment if your proposal will be subject to any of the following:**

Planning Permission  
Environmental Impact Assessment  
Strategic Environmental Assessment

However, you will still need to summarise your findings in in the summary section of the form below.

Please contact [climatechange@northyorks.gov.uk](mailto:climatechange@northyorks.gov.uk) for advice.

<b>Title of proposal</b>	Zero Emission Buses Funding Area Funding Bid
<b>Brief description of proposal</b>	North Yorkshire County Council is submitting a Business Case to the Department for Transport through the Zero Emission Bus Regional Area scheme to secure funding for new zero emission buses and supporting charging infrastructure in the Harrogate and Knaresborough area.
<b>Directorate</b>	Business and Environmental Services
<b>Service area</b>	Travel, Environmental and Countryside Services
<b>Lead officer</b>	Cathy Knight
<b>Names and roles of other people involved in carrying out the impact assessment</b>	None
<b>Date impact assessment started</b>	August 2021

**Options appraisal**

Were any other options considered in trying to achieve the aim of this project? If so, please give brief details and explain why alternative options were not progressed.

Options considered:

- Option 1 – Do Nothing: No Zero Emission Buses Investment
- Option 2 – Do Minimum: Local/third party Zero Emission Buses Investment
- Option 3 – Do Something: 20 single deck (10 with op charge, 10 without) 19 double deck (with op charge), depot infrastructure and 2 pantographs

Option 1 “Do Nothing” would see no deployment of zero emission vehicles in the defined area and the existing diesel engine vehicles would continue to operate. This would result in worsening air quality, the region falling behind in the national decarbonisation agenda, a lack of levelling up and investment in the region and no improvements for the transport user.

Option 2 “Do Minimum” would see some deployment of zero emission vehicles in the defined area but on a much smaller scale and over a longer period of time. As a result, there would be much slower improvements to air quality, improvements for the transport user and significantly less levelling up and investment in the region. The region would not benefit from an acceleration of decarbonising the public transport network. There would be no opportunity to monitor and evaluate a full depot conversion or support bus manufacture of the next generation of zero emission battery electric double deck vehicles suitable for operation outside urban areas without the ZEBRA funding requested within this business case.

A fourth option of “Do Everything: All operators in Harrogate” could be considered. During March 2021 North Yorkshire County Council commissioned consultants to investigate and understand the county’s local bus operators’ preparedness for transitioning to zero emission bus fleets. The six largest operators, representing approximately 95% of the public transport network in North Yorkshire, were asked to take part – this included Connexions Buses. Comments to the commissioned consultants included Connexions Buses are not considering zero emission bus investment at present. As part of its Bus Service Improvement Plan the council has committed to supporting operators facing difficulties transitioning to zero emission vehicles.

**Preferred Option**

The preferred option is Do Something Option 3. The current carbon impact of each diesel vehicle to be replaced as part of this proposal is an average 1282g CO<sub>2</sub> per km compared to 438g per km for comparable emission electric vehicles to be procured. As such this option delivers significant air quality improvements, has full support of the operator involved in the proposal – this includes £12,412,190 investment representing 61% of the proposal costs. This option will convert the first North Yorkshire bus depot to full electric bus operation. Buses will be both double and single deck vehicles and their operations having varying route lengths and operational terrain. The full conversion of a depot

will provide the ZEBRA programme with a rare and unique opportunity to monitor and evaluate to ensure a better understanding of such a significant conversion and subsequent information will be available for other operators and local authorities to learn from.

**What impact will this proposal have on council budgets? Will it be cost neutral, have increased cost or reduce costs?**

Please explain briefly why this will be the result, detailing estimated savings or costs where this is possible.

As part of the business case preparation and submission there will be minimal impact to council budgets. It is a requirement of the DfT ZEBRA Standard Track – Supplementary Guidance that Local Transport Authority's should have received external legal advice on their business case proposal.

In terms of project delivery, if the business case is successful the council will receive DfT funds and act as grant administrator for those funds. In addition, the following cost categories exist for North Yorkshire County Council during delivery of the proposal:

- Project management and administration
- Monitoring and evaluation
- Communication / Marketing
- Financial oversight
- Other professional and technical support

These will be covered through existing staff and budgets.

<p>How will this proposal impact on the environment?</p> <p>N.B. There may be short term negative impact and longer term positive impact. Please include all potential impacts over the lifetime of a project and provide an explanation.</p>	<p><b>Positive impact</b> (Place a X in the box below where</p>	<p><b>No impact</b> (Place a X in the box below where</p>	<p><b>Negative impact</b> (Place a X in the box below where</p>	<p>Explain why will it have this effect and over what timescale?</p> <p>Where possible/relevant please include:</p> <ul style="list-style-type: none"> <li>• Changes over and above business as usual</li> <li>• Evidence or measurement of effect</li> <li>• Figures for CO<sub>2</sub>e</li> <li>• Links to relevant documents</li> </ul>	<p>Explain how you plan to mitigate any negative impacts.</p>	<p>Explain how you plan to improve any positive outcomes as far as possible.</p>
<p>Minimise <b>greenhouse gas emissions</b> e.g. reducing emissions from travel, increasing energy efficiencies etc.</p>	<p>Emissions from travel</p>	<p>X</p>		<p>The proposal will replace 39 diesel engine vehicles with battery electric vehicles on a one for one basis. The current carbon impact of each combustion vehicle to be replaced as part of this proposal is an average 1282g CO<sub>2</sub> per km compared to 438g per km for the battery electric vehicles. This positive impact will be ongoing over the life of the new vehicles. There will also be emission savings from road tanker diesel delivery as this will no longer be required.</p>		
	<p>Emissions from construction</p>		<p>X</p>	<p>It is not anticipated that this proposal will impact emissions from construction.</p>		
	<p>Emissions from</p>		<p>X</p>	<p>It is not anticipated that this proposal will impact emissions from running of buildings.</p>		

<p>How will this proposal impact on the environment?</p> <p>N.B. There may be short term negative impact and longer term positive impact. Please include all potential impacts over the lifetime of a project and provide an explanation.</p>	<p><b>Positive impact</b> (Place a X in the box below where</p>	<p><b>No impact</b> (Place a X in the box below where</p>	<p><b>Negative impact</b> (Place a X in the box below where</p>	<p>Explain why will it have this effect and over what timescale?</p> <p>Where possible/relevant please include:</p> <ul style="list-style-type: none"> <li>• Changes over and above business as usual</li> <li>• Evidence or measurement of effect</li> <li>• Figures for CO<sub>2</sub>e</li> <li>• Links to relevant documents</li> </ul>	<p>Explain how you plan to mitigate any negative impacts.</p>	<p>Explain how you plan to improve any positive outcomes as far as possible.</p>	
	running of buildings						
	Other		X		It is not anticipated that this proposal will impact other emissions.		
<p>Minimise <b>waste</b>: Reduce, reuse, recycle and compost e.g. reducing use of single use plastic</p>			X		It is not anticipated that this proposal will minimise waste.		
<p>Reduce <b>water</b> consumption</p>			X		It is not anticipated that this proposal will reduce water consumption.		
<p>Minimise <b>pollution</b> (including air, land, water, light and noise)</p>	X				The current carbon impact of each combustion vehicle to be replaced as part of this proposal is an average 1282g CO <sub>2</sub> per km compared to 438g per km for the battery electric vehicles. This positive impact will be ongoing over the life of the new vehicles. There will also be emission savings from road tanker		

<p>How will this proposal impact on the environment?</p> <p>N.B. There may be short term negative impact and longer term positive impact. Please include all potential impacts over the lifetime of a project and provide an explanation.</p>	<p><b>Positive impact</b> (Place a X in the box below where</p>	<p><b>No impact</b> (Place a X in the box below where</p>	<p><b>Negative impact</b> (Place a X in the box below where</p>	<p>Explain why will it have this effect and over what timescale?</p> <p>Where possible/relevant please include:</p> <ul style="list-style-type: none"> <li>• Changes over and above business as usual</li> <li>• Evidence or measurement of effect</li> <li>• Figures for CO<sub>2</sub>e</li> <li>• Links to relevant documents</li> </ul>	<p>Explain how you plan to mitigate any negative impacts.</p>	<p>Explain how you plan to improve any positive outcomes as far as possible.</p>
				<p>diesel delivery as this will no longer be required.</p> <p>As electric vehicles are quieter than combustion engine alternatives there will be a reduction in noise pollution.</p>		
<p>Ensure <b>resilience</b> to the effects of climate change e.g. reducing flood risk, mitigating effects of drier, hotter summers</p>		X		<p>It is not anticipated that this proposal will impact resilience to the effects of climate change.</p>		
<p>Enhance <b>conservation</b> and wildlife</p>		X		<p>It is not anticipated that this proposal will enhance conservation and wildlife.</p>		
<p>Safeguard the distinctive characteristics, features and special qualities of <b>North Yorkshire's landscape</b></p>		X		<p>It is not anticipated that this proposal will safeguard the distinctive characteristics, features and special qualities of North Yorkshire's landscape.</p>		
<p>Other (please state below)</p>		X		<p>It is not anticipated that this proposal will impact other.</p>		

<p><b>Are there any recognised good practice environmental standards in relation to this proposal?</b> If so, please detail how this proposal meets those standards.</p>
<p>Not currently aware of any good practice environmental standards relating to this proposal.</p>
<p><b>Summary</b> Summarise the findings of your impact assessment, including impacts, the recommendation in relation to addressing impacts, including any legal advice, and next steps. This summary should be used as part of the report to the decision maker.</p> <p>Options considered:</p> <ul style="list-style-type: none"> <li>• Option 1 – Do Nothing: No Zero Emission Buses Investment</li> <li>• Option 2 – Do Minimum: Local/third party Zero Emission Buses Investment</li> <li>• Option 3 – Do Something: 20 single deck (10 with op charge, 10 without) 19 double deck (with op charge), depot infrastructure and 2 pantographs</li> </ul> <p>Option 3 has been included as the preferred option within the business case.</p> <p>It is not anticipated that this proposal impact emissions from construction, running of buildings and other. It is not anticipated that this proposal will minimise waste or reduce water consumption. . It is not anticipated this proposal will impact resilience to the effects of climate change or will enhance conservation and wildlife or safeguard the distinctive characteristics, features and special qualities of North Yorkshire’s landscape.</p> <p>The proposal will have a positive impact and emissions from travel and will replace 39 diesel engine vehicles with battery electric vehicles on a one for one basis. The current carbon impact of each combustion vehicle to be replaced as part of this proposal is an average 1282g CO2 per km compared to 438g per km for the battery electric vehicles. This positive impact will be ongoing over the life of the new vehicles. There will also be emission savings from road tanker diesel delivery as this will no longer be required.</p> <p>7.4 The proposal will have a positive impact on the pollution. The current carbon impact of each combustion vehicle to be replaced as part of this proposal is an average 1282g CO2 per km compared to 438g per km for the battery electric vehicles. This positive impact will be ongoing over the life of the new vehicles. There will also be emission savings from road tanker diesel delivery as this will no longer be required. As electric vehicles are quieter than combustion engine alternatives there will be a reduction in noise pollution.</p>

**Sign off section**

This climate change impact assessment was completed by:

<b>Name</b>	Cathy Knight
<b>Job title</b>	Commercial Sector Service Development Manager
<b>Service area</b>	Travel, Environmental and Countryside Services
<b>Directorate</b>	Business and Environmental Services
<b>Signature</b>	Cathy Knight
<b>Completion date</b>	26/08/2021

**Authorised by relevant Assistant Director (signature):**

**Date:**