North Yorkshire County Council

Business and Environmental Services

Executive Members

20 August 2021

Asset Data Collection and Processing Contract – Automated Highway Asset Survey

Report of the Assistant Director – Highways and Transportation

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1.0   Purpose of Report

1.1   To seek authorisation from the Corporate Director, Business and Environmental Services (BES), in consultation with the BES Executive Member for Access,
- to establish a procurement framework for the provision of automated highway asset data collection and processing
- to call off a contract from this framework for the supply of automated highway asset data collection and processing in North Yorkshire.

2.0   Background

2.1   The County Council carries out annual Course Visual Inspection Surveys (CVIS) on its Category 4a, 4b and 5 roads, accounting for over 6000km of our network. These surveys are designed to establish the condition of the highway network, with the results being used to help prioritise future maintenance activities.

2.2   Traditionally these surveys have been carried out manually, with two network surveyors travelling in a vehicle conducting a driven survey. In 2018 the County Council began working with Vaisala Limited (Vaisala) on the trial and development of Road AI, a system designed to automate CVIS. This trial was part funded by the Department for Transport. The trial identified that the system was able to meet required standards for carriageway condition surveys.

2.3   Funding for the trial ended in March 2020. Covid-19 and the restrictions placed on working practices severely compromised the ability of the Highway's Asset Management Team to undertake traditional CVIS. Due to Road AI only requiring one surveyor, and the unprecedented circumstances the Council faced, a short-term agreement was put in place with Vaisala, authorised through a Director's recommendation. This agreement expires on the 31st May 2022.

2.4   The use of an AI based system has provided many benefits, including
- reducing the time needed to complete CVI surveys,
- ability to redeploy surveying team on other non-carriageway surveys tasks
- providing an updated annual video survey of the County's carriageway network, helping during remote working.
- providing a wider range of condition data to assist with investment decisions

3.0   Proposed Way Forward

3.1   We are seeking to establish a new compliant contract for an automated highways asset survey and data capture system from 2022. As the market has developed significantly since the trial with Vaisala commenced in 2018, it is proposed that an open procurement process is undertaken.

3.2   In order to open up procurement opportunities for other local highway authorities, particularly those bordering or close to North Yorkshire, we are seeking to establish a single supplier framework that other contracting authorities would be able to access and call off from.

3.3   Once the framework is established, the County Council would call off a contract for the provision of required services from this Framework in North Yorkshire.

4.0   Financial Implications

4.1   It is anticipated that the annual cost of an AI based system would be between £50K-£100K. The system would be funded from the LTP Capital Programme Budget and has been accounted for in future capital budget planning.

4.2   The contents of this report make no changes to the BES Capital Plan expenditure limits.

5.0   Equalities Implications

5.1   An Equalities Impact Assessment screening form is attached as Appendix 1. It is the view of Officers that the proposal will have no adverse equality impact on any of the protected characteristic groupings.

6.0   Legal Implications

6.1   The proposal is to carry out an OJEU compliant procurement process in accordance with the Public Contracts Regulations 2015nd The Public Procurement (Amendment etc.) (EU Exit) Regulations 2020

7.0   Climate Change Impact

7.1   A climate change impact assessment has been carried out, see Appendix 2. It has identified that the use of an AI based system has the ability to reduce carbon emissions by reducing vehicle mileage and helping the Council to more effectively manage and maintain its carriageway network.

8.0   Recommendation

8.1   It is recommended that the Corporate Director, BES and the BES Executive Member for Access
    i.   authorise the establishment of a procurement framework for the provision of automated highway asset data collection and processing
    ii.   authorise officers to call off a contract from this framework for the supply of automated highway asset data collection and processing in North Yorkshire

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BARRIE MASON
Assistant Director - Highways and Transportation

Author of Report: James Gilroy

Backing Documents: None

Automated Highway asset data collection and processing contract.

Initial equality impact assessment screening form
(As of October 2015 this form replaces 'Record of decision not to carry out an EIA')

This form records an equality screening process to determine the relevance of equality to a proposal, and a decision whether or not a full EIA would be appropriate or proportionate.

Directorate	Business and Environmental Services
Service area	Highways & Transportation
Proposal being screened	Procurement of an Automated Highway asset data collection and processing contract.
Officer(s) carrying out screening	James Gilroy
What are you proposing to do?	Establishment of a procurement framework for the provision of automated highway asset data collection and processing and the call off of a contract from this framework
Why are you proposing this? What are the desired outcomes?	Improve the efficiency of the carriageway condition surveys.
Does the proposal involve a significant commitment or removal of resources? Please give details.	No – the procurement would not involve a significant commitment or removal of resources.

Impact on people with any of the following protected characteristics as defined by the Equality Act 2010, or NYCC's additional agreed characteristic
As part of this assessment, please consider the following questions:

- To what extent is this service used by particular groups of people with protected characteristics?
- Does the proposal relate to functions that previous consultation has identified as important?
- Do different groups have different needs or experiences in the area the proposal relates to?

If for any characteristic it is considered that there is likely to be a significant adverse impact or you have ticked 'Don't know/no info available', then a full EIA should be carried out where this is proportionate. You are advised to speak to your Equality rep for advice if you are in any doubt.

Protected characteristic	Yes	No	Don't know/No info available
Age		✓	
Disability		✓	
Sex (Gender)		✓	
Race		✓	
Sexual orientation		✓	
Gender reassignment		✓	
Religion or belief		✓	
Pregnancy or maternity		✓	
Marriage or civil partnership		✓	
NYCC additional characteristic			

		✓	
People in rural areas		✓	
People on a low income		✓	
Carer (unpaid family or friend)		✓	
Does the proposal relate to an area where there are known inequalities/probable impacts (e.g. disabled people's access to public transport)? Please give details.	No, the proposals do not negatively affect any groups of people.		
Will the proposal have a significant effect on how other organisations operate? (e.g. partners, funding criteria, etc.). Do any of these organisations support people with protected characteristics? Please explain why you have reached this conclusion.	No, the proposal will have no effect on how other organisations work.		
Decision (Please tick one option)	EIA not relevant or proportionate:	✓	Continue to full EIA:	
Reason for decision	The procured system will provide carriageway condition data based on objective technical criteria. Condition survey results will contribute towards the identification and prioritisation of proposed carriageway maintenance schemes.		
Signed (Assistant Director or equivalent)	Barrie Mason		
Date	09/08/21		

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

| **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 for advice. |

Title of proposal	**Automated Highway asset data collection and processing contract.**
Brief description of proposal	To seek authorisation from the Corporate Director, Business and Environmental Services (BES), in consultation with the BES Executive Member for access, • to establish a procurement framework for the provision of automated highway asset data collection and processing • to call off a contract from this framework for the supply of automated highway asset data collection and processing in North Yorkshire.
Directorate	**BES**
Service area	**Highways and Transportation**
Lead officer	**James Gilroy**

Names and roles of other people involved in carrying out the impact assessment	
Date impact assessment started	03.08.2021

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.

Revert back to manual completion of CVI surveys was considered, however the benefits of using an AI based system are significant in terms of data sharing, efficiencies and the ability to complete the required surveys quicker.

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.

Whilst there is some capital-funded expenditure, an AI based system can help to reduce costs through improved efficiency in scheme design & development, reduced vehicle mileage. The potential exists to roll out access to the collected video data across the Council, particularly in the Customer Service Centre to assist with managed customer contacts and queries.

How will this proposal impact on the environment? 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.		Positive impact (Place a X in the box below where	No impact (Place a X in the box below where	Negative impact (Place a X in the box below where	Explain why will it have this effect and over what timescale? Where possible/relevant please include: • **Changes over and above business as usual** • **Evidence or measurement of effect** • **Figures for CO_2e** • **Links to relevant documents**	Explain how you plan to mitigate any negative impacts.	Explain how you plan to improve any positive outcomes as far as possible.
Minimise **greenhouse gas emissions** e.g. reducing emissions from travel, increasing energy efficiencies etc.	Emissions from travel	x			Reduced mileage to complete CVI surveys Reducing the need for site visits		
	Emissions from construction	x			Helping the council to more effectively manage and maintain its carriageway network. Improved information will allow the Council to improve coordination of works to improve delivery efficiency.		
	Emissions from running of buildings		x				
	Other		x				
Minimise **waste:** Reduce, reuse, recycle and compost e.g. reducing use of single use plastic			x				

How will this proposal impact on the environment? **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.**	**Positive impact** (Place a X in the box below where	**No impact** (Place a X in the box below where	**Negative impact** (Place a X in the box below where	Explain why will it have this effect and over what timescale? **Where possible/relevant please include:** • **Changes over and above business as usual** • **Evidence or measurement of effect** • **Figures for CO_2e** • **Links to relevant documents**	Explain how you plan to mitigate any negative impacts.	Explain how you plan to improve any positive outcomes as far as possible.
Reduce **water** consumption		x				
Minimise **pollution** (including air, land, water, light and noise)	x			Reduced vehicle mileage		
Ensure **resilience** to the effects of climate change e.g. reducing flood risk, mitigating effects of drier, hotter summers	x			AI technology can help to improve carriageway condition monitoring, helping to identify climate change impacts on the carriageway network. AI technology can also be used to assess flood locations etc to help with future planning and response		
Enhance **conservation** and wildlife		x				

How will this proposal impact on the environment? 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.	Positive impact (Place a X in the box below where	No impact (Place a X in the box below where	Negative impact (Place a X in the box below where	Explain why will it have this effect and over what timescale? Where possible/relevant please include: • **Changes over and above business as usual** • **Evidence or measurement of effect** • **Figures for CO$_2$e** • **Links to relevant documents**	Explain how you plan to mitigate any negative impacts.	Explain how you plan to improve any positive outcomes as far as possible.
Safeguard the distinctive characteristics, features and special qualities of **North Yorkshire's landscape**		x				
Other (please state below)		x				

Are there any recognised good practice environmental standards in relation to this proposal? If so, please detail how this proposal meets those standards.
N/A

Summary 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.

It has identified that the use of an AI based system has the ability to reduce carbon emissions by reducing vehicle mileage and helping the Council to more effectively manage and maintain its carriageway network.

Sign off section

This climate change impact assessment was completed by:

Name	James Gilroy
Job title	Team Leader Highway Asset Management
Service area	Highways and Transport
Directorate	BES
Signature	J Gilroy
Completion date	03.08.2021

Authorised by relevant Assistant Director (signature): Barrie Mason

Date: 09/08/21