

Decision Session-Executive Member for Transport and Planning

9 March 2017

Report of the Corporate Director of Economy & Place

Digital Highway Inspection Report

Summary

- 1. City of York Council have procured a suite of digital highways inspection data, this innovative approach to highway asset condition assessment is now being used to form our annual maintenance programme. The data allows a richer dataset to be used to inform lifecycle planning and effective and efficient maintenance of the highway. An overview of the data can be seen in Annex 1 of this report.
- 2. The data will allow a more complete picture of highway condition and our plans for renewal and replacement to be communicated to the public, businesses and officers and members of the council.
- 3. A data led, innovative approach to highway inspection, appraisal and works delivery is at the leading edge of national highway maintenance policy. As a consequence of this work the Council has been asked to participate in a trial for usage of digital asset data to identify future road maintenance priorities and early intervention of defects by the Department for Transport (DfT) and the DfT have announced funding for the trial in January 2017 and discussions as to scope and scale have begun with the department.

Recommendations

- 4. The Executive Member is asked to note and endorse:
 - The approach outlined in this report and Annex 1, to make recommendations for future approaches and the usage of digital highway inspection methods.

- 2) The longer term development of efficient and effective highways works programmes based on digital highways data and the lead role CYC is playing nationally in the development of innovative technologies.
- 3) A future paper will be brought to the Executive Member to highlight progress in the usage of the digital data, the DfT trial and our development of the requirements of the new code of practice.

Reason: Effective and efficient usage of highways maintenance budgets can be underpinned through the usage of innovative digital asset data.

Background

- 5. Highway inspectors currently manually inspect the highway network in York, a range of safety and condition inspections are carried out to proactive and reactive schedules to inform repairs and the usage of annual highway renewal funding from DfT and the council.
- 6. Digital highway asset data enables a wider suite of inspections to be used and allows repairs and proactive works programmes to be developed across multiple years. The greater ability to manage data thereby ensures funding is better targeted to identify sections of the network that are degrading and repairs can be carried out to redress this.
- 7. Physical highway inspection will always be required for safety inspections, however, it is likely that as the digital data develops and we become better able to manipulate and use it to drive our works programmes our condition assessments may be developed through the usage of such data rather than physical inspection.
- 8. The digital data will also be able to be used to optimise our risk based inspection and works programmes, this will be essential to realise the expectations of the new Well Maintained Highway Infrastructure Code of Practice that will be mandatory for all Highway Authorities from October 2018. This approach will also be key to ensure that we manage the risks for all users of the highway network appropriately, reduce injuries and claims against the council.

Consultation

9. Our approach to the usage of digital highway inspection data is in its early stages, we have began to discuss the concept with officers and members of the council and this will be reinforced as part of the communication of our annual maintenance programme for 2017/18. The DfT trial has attracted a range of media interest, we will produce further communications following our discussions with DfT and the development of our proposals to deliver this trial.

Options

10. This report and the detail in Annex 1 are provided as an early review of our approach to the usage of digital highway inspection data, they are prepared to inform the Executive Member and to seek endorsement of the approach. As such the only options are those in the recommendations section of this paper.

Analysis

- 11. DfT funding is moving more and more to the usage of innovative approaches and wider evidence based on richer highway asset data. The DfT Challenge fund, incentive fund and national productivity investment fund will all reward new approaches to data led asset management, this places City of York Council in a strong position to maximise future highways funding allocations and enable effective targeting of any resources that are available.
- 12. The current DfT funded trial proposes to use vehicle mounted cameras across refuse vehicles, CYC vans or buses and to collect none carriageway data through bicycle mounted cameras. The data will be analysed by Gaist and CYC digital data analysts who will identify inspection programmes based on emerging defect evidence and risk based outputs. Resultant work will then be undertaken by dedicated works gangs utilising trials of new materials and methodologies.
- 13. We will record and analyse all findings and share the outputs with all stakeholders. A future paper will be brought to the Executive Member to highlight progress and the ways in which early intervention using emerging materials and applications is improving our network in a risk based approach. The paper will highlight how we have used digital data to achieve this and the adoption of the national code of practice.

Council Plan

14. The usage of digital highway inspection data to direct and target the available highways funding helps to deliver the Council Plan priority 'a focus on front line services'.

Implications

15. There are no risks and implications associated with this report, the content of the report and Annex 1 show the early stages of our digital highway inspection trials and the report only seeks to give the Executive Member an overview of our approach and to seek an early endorsement.

Contact Details

Author: Steve Wragg, Flood Risk and Asset Manager Highways 553401	Chief Officer Responsible for the report: Neil Ferris, Director of Economy and Place		
	Report Approved	Date	23 February 2017
Wards Affected:			All 🗹

For further information please contact the author of the report

Annexes Annex 1 – Digital Highways Inspection Data Overview