

19 March 2020**Agenda Item: 5**

REPORT OF THE CORPORATE DIRECTOR, PLACE

HIGHWAY ASSET MANAGEMENT – INTRODUCTORY REPORT

Purpose of the Report

1. To allow Members to review the information contained within this report – and in the presentation to be available at the meeting - and propose recommendations which officers will develop and present in a further report to this Committee.

Information

2. This report will be accompanied by a presentation which will provide Members with further information and details about each of the topics covered below.
3. The presentation will make reference to the Authority's Highway Asset Management System (HAMS) and its role and function in supporting and underpinning Highway Asset Management in the county.
4. This is an introductory report which along with the presentation will provide an overview and background to allow specific aspects to be focused on through a follow up report in May 2020.

The County Council's Highway Infrastructure Asset Management Plan

5. The County Council maintains a large and diverse number of highway assets, these include:
 - 583 kilometres of A roads
 - 297 Kilometres of B roads
 - 821 kilometres of C roads
 - 2,737 kilometres of unclassified roads
 - 4302 kilometres of footway
 - 93,894 street lighting columns
 - 7,706 traffic signs
 - 5,927 bollards and beacons
6. Nottinghamshire's highways are critical to the county's economic and social wellbeing, they provide access to employment, recreational, health and educational opportunities which are fundamental to our way of life. Virtually every journey made within Nottinghamshire and every movement of goods or commodities will require access to the highway network at some point.

7. In May 2013, the UK Roads Liaison Group produced the Highway Infrastructure Asset Management Guidance Document. This set out 14 recommendations that all local Highway Authorities should employ to demonstrate they are following Asset Management principles in all aspects of Highway Maintenance Management.

8. The definition of Highway Asset Management as detailed in the Highway Infrastructure Asset Management Guidance Document is:

‘A systematic approach to meeting the strategic need for the management and maintenance of highway infrastructure assets through long term planning and optimal allocation of resources in order to manage risk and meet the performance requirements of the authority in the most efficient and sustainable manner.’

9. The Highway Infrastructure Asset Management Guidance Document identifies the requirement for the production of a Highway Infrastructure Asset Management Plan (HIAMP) in order for Authorities to embed the required principles in their working practices. During development of the framework for Nottinghamshire’s HIAMP, the 14 recommendations in the UK Roads Liaison Group guidance document were used as the cornerstone to good asset management practice. One key element was the principle of Policy, Strategy & Plan, whereby the HIAMP follows a clear line of sight from the local and national policies that shape the future direction of the County Council, via the strategies employed to meet these policies and what this means for specific assets and their corresponding performance data.

- Policy - Local policies such as NCC’s Strategy Plan, Service Plan, the Local Transport Plan, and the Highway Network Management Plan plus national legislation and policies such as The Highways Act 1980 and the Well-Managed Highway Infrastructure: A Code of Practice document.
- Strategy - This forms the major part of the document and demonstrates the steps being taken in Nottinghamshire to meet the 14 recommendations in the Highway Infrastructure Asset Management Guidance Document produced by the UK Roads Liaison Group. The HIAMP is structured so that the recommendations are the Chapter headings, with an extract from the guidance document, followed by ‘The Nottinghamshire Approach’ which outlines how these are met.
- Plan - Chapters 18 to 22 contain the Asset Management Plans for specific assets, namely: Carriageways, Footways & Cycleways, Structures, Highway Lighting & Traffic Management Systems and Drainage. These final chapters show in greater detail how the County Council manages these assets to not only meet the 14 recommendations in the HMEP guidance, but also to make best use of the resources available to provide a safe and efficient working highway network for those who travel within or through the county.

10. The document, first published in 2015 is bespoke to Nottinghamshire and has since been updated in 2018 following the publication of the Well-Managed Highway Infrastructure: A Code of Practice document (2016) which advocates a ‘Risk-Based’ approach to the maintenance management of highway assets. The HIAMP is written with these principles in mind and addresses the issues of network hierarchy and inspection frequency to build in the principles of this new code.

11. The Asset Management Plans for specific asset groups, named above, details the maintenance plan for these assets. With carriageways being the largest asset group,

much of the initial focus was on this asset type but there is also an embedded structures plan which maintains the county's bridge stock and other structures. Street lighting has been the subject of major innovation and development over the last decade and with the introduction of cost effective LED lamps, the maintenance of this asset group has changed significantly.

12. In recent years, Nottinghamshire has moved away from the 'worst-first' treatment method which, coupled with years of reduced investment nationally, an increase in climatic impact and the importance of maintaining the network in a safe and serviceable condition had led to a maintenance backlog for most asset groups. The HIAMP recognises the need to build a forward maintenance programme with a far greater emphasis on preventative treatment, balanced with an element of 'worst-first' as some assets still need to be 'brought back to life' to enable their effective future maintenance to begin. It commits the County Council to enhance the application of Asset Management Principles to maintain the network in a condition which is safe, resilient and free-flowing for all road users.

Highway Maintenance Asset Management Funding - Background

13. Spring 2015 saw the culmination of over five years development work by the Department for Transport to create a new set of funding models for highways maintenance across the country. A history of these developments is listed in the HIAMP with the key outcome being that in the spring of 2015, the new funding models for local authority highway maintenance were announced. It consisted of three key elements:
 - The Incentive Fund. (HAM - Self-assessment questionnaire)
 - A revised 'Needs-Based' Funding Formula. (Based on Network Length)
 - The Challenge Fund. (Separate large scheme bid process)
14. The purpose of the Incentive Fund introduction was to promote the adoption of good Highway Asset Management practice and drive efficiencies across all local authorities to ensure value for money. At the time, its phased introduction over several years allowed highway authorities to adopt efficiency measures, to gain buy-in from their senior leaders and to make the necessary transformational changes to the full adoption of 'Asset Management Principles'.
15. Over the last few years, the 'Needs-Based' Funding Formula has been reduced with an expectation that continuous improvement in efficiencies of delivery would continue. This level of improvement was then reflected in the funding awarded for the Incentive Fund to each Authority, through the size of the funding received.
16. Annually local authority's complete a self-assessment Incentive Fund Questionnaire which requires a Section 151 Officer declaration to confirm it is accurate.
17. The self-assessment questionnaire has 22 questions in total, divided into five categories:
 - Asset Management
 - Resilience
 - Customer
 - Benchmarking & Efficiency
 - Operational Delivery

18. A local authority's Band is based on its score in this self-assessment questionnaire:

- Band 1: Does not reach Level 2 or Level 3 in at least 15 of the 22 questions.
- Band 2: Must reach Level 2 or Level 3 in at least 15 of the 22 questions.
- Band 3: Must reach Level 3 in at least 18 of the 22 questions.

To maintain funding at the maximum level authorities needed to reach Band 3 within 3 years and Nottinghamshire is considered a Band 3 Authority.

19. The DfT Incentive Fund places the need for a robust HIAMP at the heart of its self-assessment methodology. It is an essential requirement of the Incentive Fund that all highway authorities must have a HIAMP and the strategies they employ to demonstrate their commitment to the adoption of asset management principles in all highway maintenance activities.

Highway Asset Management

20. As time goes by Highway Assets that are currently in good condition will deteriorate. To keep on top of the deterioration of Nottinghamshire's assets the County Council must invest continually in maintenance. Whilst the County Council is unlikely to ever be in the position where it has enough money to maintain every asset that forms part of the maintenance backlog in a single year, it is prudent to make the best use of the resources it has to get the best investment results for its stakeholders.

21. How the Authority invests is critical to achieving the best outcome for its customers. Is the highway so poor that it might fail completely, or can it be repaired to extend its life before having to do a full replacement? A good analogy would be to ask whether you should sand and re-paint window frames regularly, at a modest cost or wait until they rot and replace the whole window, at a significantly greater cost.

22. In a climate where budgets and resources are precious, Nottinghamshire County Council is facing significant challenges in deciding how to manage its assets effectively. The adoption of Asset Management Principles can deliver a systematic approach to this by planning well into the future and making informed decisions based on sound engineering.

23. It is recognised that adopting these principles will enable the Authority to identify the best allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers. Asset management therefore supports business decisions and provides longer term financial benefits.

24. Historically, Nottinghamshire has largely followed a short-term approach to structural highway maintenance, with an element of preventative maintenance through surface dressing. The Council identified the worst condition roads through technical surveys, local engineering knowledge and political input to develop a one year programme of road resurfacing and reconstruction. This is easily understood by the public and elected Members who see a road in poor condition and will see it as the Council's duty to repair it.

25. The County Council proposed in the HIAMP to increase the life span of its roads and reduce the percentage of roads in need of repair by balancing the 'worst-first' approach

with a parallel programme of preventative maintenance. This approach formed the basis of its Highways Infrastructure Asset Management Plan. The County Council continues to develop its future maintenance programme consisting of a list of candidate sites (or Candidate List) of both major resurfacing and preventative maintenance. To maximise the maintenance benefits, it is possible to create a multi-year programme though the ability to be prescriptive diminishes the further into the future you go. Therefore, a prioritised Candidate List rather than a defined programme has been developed which is banded based on likely short, medium and longer-term maintenance objectives.

26. To supplement the approach described in the HIAMP – *and in direct response to concerns raised by residents* - the County Council has also committed to spend an additional £20million between 2018 and 2022 on the county's residential roads. This additional funding forms part of the £142million in capital expenditure which will have been invested in the county's roads during the same period and has allowed a significant number of maintenance schemes to be undertaken at locations identified by Members and which were of concern to local communities.
27. As the Authority continues to develop a more comprehensive and refined picture of its asset condition, it will use a process known as 'Deterioration Modelling' to predict the relative condition of the highway network over the coming years. This will help the County Council to decide where it should be channelling its resources at the optimum time to treat the roads in the most cost-effective way, providing the greatest benefit. The key question is how the Council will decide which roads should have preventative maintenance treatment and on which ones to undertake major resurfacing works. It's a matter of picking the right point on the 'Deterioration Curve', and the right treatment at the right time. Whilst the 'candidate list' for future years remains 'indicative', it will still be utilised annually to create the in-year programme.
28. The HIAMP recognises that the approach needs to be communicated clearly and prescriptively through the correct channels to ensure engagement at a strategic level. Asset Management principles and methodology will only be successful if key decision makers are on board and can visualise the long-term benefits and savings to be made from this approach, based upon sound engineering and accurate costing. Whilst the process focuses on road condition, the same process holds true for all asset types including street lighting, structures, major signs, safety fencing, trees and drainage.

Whole Government Accounting

29. Whole Government Accounting and the valuation of the Highway Asset using the Chartered Institute of Public Finance and Accountancy (CIPFA) model is an annual process by which the current Gross Replacement Cost (GRC) and the Annual Depreciated Replacement Cost (DRC) are determined. Year on year comparison of this data for the main asset groups provides a good indication on the health of the Highway Network. Further information on this will be included in the presentation.

The Role of Other Organisations and Individuals.

30. The County Council works with its neighbouring authorities to ensure that its infrastructure hierarchy is similar and that similar roads are treated in similar ways. As

each authority has developed its own Policy, Strategy and Plan to manage the Highway Asset, it is completely acceptable that there will be some variation.

31. A number of asset types are reliant on other bodies, groups and agencies to allow their effective operation. A good example of this is the Drainage Asset, which has been the subject of a separate report to this Committee.

Other Options Considered

32. The option to not maintain the Highway Asset is not possible due to other duties under the Highways Act 1980 and the requirements of the Department for Transport.

Statutory and Policy Implications

33. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

34. The financial implications of this report will be dependent upon the findings and recommendations of the Committee. Any findings may form future recommendations to the Communities and Place Committee.

Implications for Sustainability and the Environment

35. The implications for sustainability and the environment are set out in the report and will be discussed during the presentation.

RECOMMENDATION/S

It is recommended that Committee:

- 1) Review the information contained in this report, its accompanying presentation and proposed developments which will be subject to a further report for this Committee to consider when it meets in May 2020.

Adrian Smith
Corporate Director, Place

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Constitutional Comments (SJE 12/02/2020)

36. This decision falls within the Terms of Reference of the Communities & Place Review & Development Committee to whom responsibility for the review and development of all functions falling under the remit of the Authority's Communities & Place Committee, including the management and maintenance of highways, has been delegated.

Financial Comments (RWK 12/02/2020)

36. There are no specific financial implications arising directly from the report.

Background Papers and Published Documents

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

- Nottinghamshire County Council's Highway Network Management Plan
- Nottinghamshire Highway Design Guide
- Design Manual for Roads & Bridges
<http://www.standardsforhighways.co.uk/ha/standards/index.htm>

Electoral Division(s) and Member(s) Affected

- All