Wiltshire Council

Cabinet

25 September 2018

Environment Select Committee

4 September 2018

Subject: Well-managed Highways Infrastructure

Cabinet Member: Councillor Bridget Wayman – Highways, Transport and Waste

Key Decision: Yes

Executive Summary

The Department for Transport (DfT) published a new Code of Practice 'Well-managed Highway Infrastructure' in October 2016. The Code provides guidance for highways authorities on highways maintenance and related infrastructure. There has been a two year period to implement the recommendations before the old Codes of Practice cease to apply.

A review has been undertaken of the Council's highways maintenance activities in view of the new Code of Practice. The review indicated that most of the recommendations were already being complied with, or were being implemented in connection with the processes being introduced in response to the Peer Review and Incentive Funding assessments. However, it was noted that the Council's Highways Inspection Manual should be updated to conform to the new Code.

The new Wiltshire Highways Safety Inspection Manual (WHSIM) sets out the inspection frequency and methodology to be used with regard to inspecting and repairing the Council's roads, footways and related infrastructure (**Appendix 1**). It describes the response times to be followed for dealing with highway defects. It has been developed following a risk based assessment (**Appendix 2**), which included consideration of the road hierarchy, collision and claims data, inspection frequencies and investigatory levels.

The Council's Skid Resistance Policy has been revised (**Appendix 3**) to comply with the latest guidance and the new Code of Practice. The highways maintenance policies which were adopted some years ago have also been reviewed, and updated (**Appendices 4 and 5**) to reflect the risk based approach in the new Code of Practice.

Proposals

That the Environment Select Committee support that:

- (i) The proposed Wiltshire Highways Safety Inspection Manual (**Appendix 1**) is adopted and used for highway safety inspections from 1 November 2018.
- (ii) The amended Skid Resistance Policy (**Appendix 3**) is adopted.
- (iii) The highway policies set out in this report (**Appendices 4 and 5**) are approved.
- (iv) The authority is delegated to the Cabinet Member, Highways, Transport and Waste and Director, Highways and Transport to make any appropriate and legally necessary amendments to the policies and inspection manual referred to above.

Reasons for Proposals

There are serious risks in connection with road maintenance, which include safety, financial and reputational aspects, especially in connection with killed and seriously injured collisions on the highway network. In order to reduce these risks it is important that the Council has clear highway inspection and maintenance procedures in place in accordance with the latest DfT guidance.

The proposed Wiltshire Highways Safety Inspection Manual takes a risk based approach to highways maintenance, and has been prepared to meet the requirements of the new Code of Practice 'Well-managed Highway Infrastructure' published in October 2016, taking into account local needs, priorities and affordability.

Alistair Cunningham Corporate Director

Wiltshire Council

Cabinet

25 September 2018

Environment Select Committee

4 September 2018

Subject: Well-managed Highways Infrastructure

Cabinet Member: Councillor Bridget Wayman - Highways, Transport and Waste

Key Decision: Yes

Purpose of Report

1. To report on the implications of the new highways maintenance Code of Practice, and approve the adoption of the Wiltshire Highways Safety Inspection Manual (WHSIM) and related highways policies.

Relevance to the Council's Business Plan

- 2. The Wiltshire Council Business Plan 2017 2027 sets out the vision to create strong communities, with priorities for growing the economy, strong communities and protecting the vulnerable. As part of growing the economy it is acknowledged that it is necessary to bring the county's roads up to an acceptable state. The goal is that road infrastructure is improved and to:
 - Improve asset management and the use of investment to improve the condition of Wiltshire roads (implementing our Highways Asset Management Strategy).
 - Promote and further development the MyWiltshire app to improve and increase the reporting of issues.

Background

- 3. The Council is responsible for the maintenance of the roads in Wiltshire, with the exception of motorways, trunk roads and those in private ownership.

 Maintaining a fit for purpose highway network is vital in order to support economic development and to ease the movement of goods and people.
- 4. The highway network represents the Council's biggest asset, and is possibly its most significant potential liability. The Council carries out programmes of maintenance and renewal, and also carries out inspections and repairs of safety defects identified by inspectors and reported by the public and others.

- 5. The highway network in Wiltshire comprises almost 4,500 kilometres of road, 3.9 million square metres of footway, 1,500 bridges and over 40,000 street lights. It has a replacement value of over £5 billion. It would cost at least £330 million to resurface all of the roads, with potentially significant additional costs to improve the structural condition of the roads.
- 6. The condition of the county's roads is important to the public. This is demonstrated by the results of the Council's own surveys and the National Highways and Transportation (NHT) surveys, which indicate low levels of public satisfaction with road conditions. In the Council's consultations on budget setting, expenditure on roads is often the service area where the public have consistently wished to see more spent.
- 7. The then Wiltshire County Council developed a Transport Asset Management Plan (TAMP) in 2005, in order to improve the management of its transport infrastructure, including the county's roads, bridges, street lighting and transport related assets. It was prepared in accordance with the then current Codes of Practice, particularly 'Well-Maintained Highways' published in July 2005.
- 8. In May 2013 the Highways Maintenance Efficiency Programme (HMEP) published the Highway Infrastructure Asset Management guidance. The guidance provides advice on implementing asset management, and makes a number of recommendations to achieve the benefits of asset management.
- 9. The Department of Transport (DfT) has been keen to ensure that authorities adopt an asset management approach and have encouraged adoption by including an incentive in the allocation of maintenance funding. The Council adopted its Highways Asset Management Policy and Strategy in May 2015 in accordance with the latest guidance.
- 10. The DfT commissioned a new Code of Practice 'Well-managed Highway Infrastructure' (the Code of Practice), which was published in October 2016 to replace the previous Code. There has been a two year period for highway authorities to implement the recommendations before the old Codes of Practice cease to apply. This has implications for highway authorities because of the different approach adopted with the new Code of Practice, especially with regard to risk management.
- 11. The Council's existing Highways Inspection Manual was adopted in May 2013. It was prepared in accordance with the earlier code of practice, and it is now considered to be appropriate to update it in view of the new Code. The Council has a number of other highway policies, including a skid resistance policy that should also be reviewed as a result of the new Code of Practice.

Main Considerations for the Council

Highways Asset Management Policy

12. The Council adopted a highways asset management policy and strategy in May 2015, which reflected the latest asset management guidance. It is suggested in the guidance that this policy should be reviewed from time to time to ensure that it is still relevant.

13. The Wiltshire Highways Asset Management Policy is:

Wiltshire Council is committed to adopting the principles of asset management, and will take a long term view when making maintenance and investment decisions. The asset management approach will deliver value for money and maximise the benefits for future prosperity by ensuring the right investment decisions are made. It will assist in targeting resources and managing risks associated with the statutory duties to maintain the highway infrastructure.

14. Wiltshire Council manages its highways assets in accordance with the policy, and develops programmes of work to maintain the highway and ensure that cost effective investments are made. It is considered that the policy is still relevant and it is not proposed to amend it at this time.

Well-managed Highway Infrastructure

- 15. The new Code of Practice 'Well-managed Highway Infrastructure' replaces three previous documents: 'Well-maintained Highways', 'Management of Highway Structures' and 'Well-lit Highways'. It is designed to promote the adoption of an integrated asset management approach to highways infrastructure, based on the establishment of local levels of service through risk-based assessments.
- 16. The intention of the Code of Practice is that authorities will develop their own levels of service, taking into account local needs, priorities and affordability. The new Code of Practice acknowledges that changing from reliance on specific guidance and recommendations in the previous Codes, to a risk-based approach determined by each Highway Authority will involve appropriate analysis, development and gaining of approval through authorities' executive processes.
- 17. The Code of Practice makes 36 recommendations with regard to how the highway infrastructure should be managed. The recommendations in a number of cases are repeated from the previous Highways Infrastructure Asset Management Guidance. In general, the new Code of Practice is considered to be a 'refresh' of the previous Codes rather than a 'rewrite'.
- 18. An initial review of the Code of Practice's recommendations indicated that in Wiltshire most of the recommendations were already being complied with, or were being implemented in connection with the asset management processes being introduced as a result of the Peer Review and Incentive Funding assessments.
- 19. However, it is apparent that there are some aspects of adopting a risk based approach which will need careful consideration because of the potential safety, financial and reputational implications.

Risk Based Approach

20. The Code of Practice indicates that authorities should adopt a risk-based approach and a risk management regime for all aspects of highway maintenance policy. This includes investment, setting levels of service, operations, including safety and condition inspections, and determining repair priorities and

- replacement programmes. There should be a clear and comprehensive understanding and assessment of the likelihood of asset failure and the consequences involved.
- 21. There are no prescriptive or minimum standards in the new Code of Practice. It is intended that the adoption of a risk based approach will enable authorities to establish and implement levels of service appropriate to their circumstances.
- 22. A risk based approach has been adopted for many years in the management of most aspects of the county's highways. For example, with regard to skid resistance, the Council has adopted a policy which has a process to identify those sites with greatest risk, and sets out the method for treating and managing them.
- 23. In some cases, a risk based approach has been adopted in response to budget limitations. Rural grass cutting has been reduced from two cuts per year to one, with more frequent cutting at visibility splays to address the higher safety risks at those locations. The emptying of gullies is being refined to concentrate on those with the greatest risk of flooding and safety issues, rather than emptying them all on a fixed timescale irrespective of whether they need to be emptied or not.
- 24. A risk based approach was taken in developing the Wiltshire Highway Infrastructure Strategy. It informs the Performance Management Framework that summarises service delivery and is reported annually to the Environment Select Committee. The asset inspection, renewal, improvement and investment strategies adopted over the years by the Council have been developed to reflect the comparative risks in connection with the assets, and the need to be flexible in order to reflect changing situations and risks.
- 25. There is one aspect of highway maintenance that needs particular consideration following the introduction of the new Code of Practice. This is the process around the treatment of carriageway defects and potholes, especially with regard to the inspection regime and management of repairs. The Council's current processes and arrangements reflect the old Code, which will be superseded, and there is a need to review them to reflect current circumstances and the requirements of the new Code of Practice.

Highways Inspection Manual

- 26. The Council's current Highways Inspection Manual (HIM) was adopted in May 2013. It sets out the inspection frequency on the network, and the intervention levels which prompt a repair according to the particular circumstances.
- 27. This document has been important in keeping the county's roads safe, reducing claims and setting public expectations. There are potentially serious legal and financial implications in not following the standards set out in the manual, which has been tested in court and has been found to be an effective process for managing risks.

- 28. When the current HIM document was last revised in 2013, only minor revisions were made to the earlier version. The new Code of Practice suggests that this document, and the approach to defect management, should be reviewed in the light of the risk based approach. This has required consideration of the network, its inspection regime and defect response criteria.
- 29. A draft Wiltshire Highways Safety Inspection Manual (**Appendix 1**) has been developed to replace the existing HIM following a risk based assessment (**Appendix 2**).
- 30. In order to adopt a risk based approach to defect repairs it has been necessary to review the county's road network, and identify a hierarchy of roads to reflect their relative importance and use. The hierarchy adopted is more detailed than the previous groupings included in the HIM, and has been agreed between the South West Highway Alliance (SWHA) members to help achieve a common hierarchy across the region.
- 31. A number of factors have been taken into account in identifying risks on the highway network. These include numbers killed and seriously injured, claims, frequency of defects, defect reports by the public and numbers of defects identified through the existing inspection regimes.
- 32. The police collect and collate injury collision statistics for the network. This data includes numbers killed and seriously injured, and slight injury collisions. Information on damage only collisions is not collected, and has not been used in the risk assessment as any information would be incomplete and could be misleading. The police collision data has been used to determine injury collision rates for the different road types.
- 33. The Council has a good record of defending claims. However, in some cases claims do have to be paid, and the locations of previous successful claims have been taken into account in considering the risks on the highway.
- 34. The MyWiltshire system has proved to be very effective at encouraging the public to report defects on the highway. The reports often contain good information on the location of defects, and this information has been used in reviewing the risks associated with the different road types on the network.
- 35. The highway inspections carried out on the network identify those defects which meet the intervention level criteria and need repairs. Generally, the number of defects can be expected to reflect the condition of the network, with the greatest number of defects generally occurring on those sections of road in poor condition.
- 36. These factors have been used to assess the potential risk associated with the different road types within the hierarchy, and to develop the WHSIM.

Skid Resistance Policy

37. The Council has in place a policy governing the use of skidding resistance tests and the actions that arise from the survey data produced. This was a requirement in the previous Code of Practice for highway maintenance, and DfT guidance.

- 38. The current skid resistance policy describes how the provision of appropriate levels of skid resistance on the Group 1 Road Network in Wiltshire would be managed to meet advice and guidance issued by the then Highways Agency for Motorways and Trunk Roads in HD 28/04 'Skid Resistance', and how measurements of skid resistance are to be made and interpreted to meet the adopted levels through a staged prioritisation process to identify sites for further investigation and treatment.
- 39. The guidance document was subsequently revised by HD 28/15, which was published in July 2015. The recent introduction of the Council's Highways Asset Management System (HIAMS), which was reported to Cabinet in November 2017, has provided the opportunity to improve the processes and data storage in connection with skid resistance and highway maintenance generally. The Skid Resistance policy has been reviewed, and minor amendments made to reflect these changes and the road hierarchy adopted by the Council in accordance with the new Code of Practice (**Appendix 3**).

Other highway policies

- 40. The county's highway policies were comprehensively reviewed by the former County Council in April 2005. Since then, some of the policies have been reviewed and amended from time to time as circumstances have changed.
- 41. The new Code of Practice recommends that there should be clear highway infrastructure maintenance policies which can be clearly understood. It was considered appropriate to review these policies and update them where required. It is intended that these should be included on the Council's website.
- 42. A summary of the main highway maintenance draft policies has been prepared (**Appendix 4**), which updates the previous versions, taking into account risk, current funding levels, legal requirements and the new Code of Practice.
- 43. These policies include the road and bridge inspection regimes adopted as a result of the new Code of Practice, street lighting, signing and routine maintenance of the network. Generally, these have not been amended significantly, but they have been updated to reflect current practice and guidance.
- The highways trees inspection policy has been developed to reflect the risk based approach to the management of these assets (**Appendix 5**).

Overview and Scrutiny Engagement

45. The Environment Select Committee has been invited to comment on this report, and the related appendices. The outcome of its considerations will be reported to the Cabinet meeting. The operation of the new WHSIM will be monitored, and its effectiveness will be reported to the Committee as part of the annual review of the highways service usually made annually in the autumn.

Safeguarding Implications

Public Health Implications

- 47. The condition of road surfaces, skid resistance and highway infrastructure all make important contributions to road safety. The timely response to defects and damage on the network contributes to keeping the highways safe for road users, residents, businesses and local communities.
- 48. The proposed WHSIM, Skid Resistance policy and highway maintenance policies will assist in keeping the roads safe by providing clear standards in accordance with the current highways maintenance Code of Practice.

Corporate Procurement Implications

49. There are no procurement implications in connection with this proposal.

Equalities Impact of the Proposal

50. Having a timely and effective response to defects on the county's roads and footways has benefits for all road users, including the more vulnerable, including pedestrians, cyclists and other non vehicle users.

Environmental and Climate Change Considerations

- 51. The road network is particularly vulnerable to the effects of climate change. In recent years we have seen the effects of severe winters and flooding which have resulted in damage to the roads and an increase in the number of potholes. In long periods of hot weather the surfaces can be damaged by melting, resulting in roads becoming slippery or deforming under traffic loads.
- 52. It is not anticipated that energy consumption would increase as a result of the recommendations of this report. The introduction of part night street lighting has reduced the carbon footprint of the Council significantly in recent years, and the future introduction of LED lighting is likely to further reduce energy consumption.
- 53. The risks associated with highway maintenance operations, and the renewal of infrastructure, are managed through Service Delivery Teams involving the Council's staff, consultants and contractors. Risk assessments are undertaken on schemes and operations with potential environmental impacts and specific mitigation measures are developed as necessary.
- 54. Robust inspection regimes and condition monitoring of the highway infrastructure will help manage the risks associated with climate change and extreme weather.

Risks that may arise if the proposed decision and related work is not taken

55. There are serious risks in connection with road maintenance. These include the safety and reputational aspects of those killed and seriously injured on the highway network. In order to reduce these risks it is important that the Council has clear highway inspection and maintenance procedures in place in accordance with the latest Code of Practice.

- 56. The new 'Well-managed Highway Infrastructure' Code of Practice takes a risk based approach to highways maintenance, and it is important that the Council's maintenance policies also adopt this approach.
- 57. The previous Code of Practice will be replaced in October 2018, and the Council should ensure that it conforms to the new Code by that date. The proposed highway inspection regime and investigatory levels are required to help Wiltshire Council to better manage its highway assets and reduce the risks of damage, claims, injury or death to Wiltshire's road users.
- 58. Not reviewing the HIM and maintenance procedures in accordance with the latest Code of Practice could have an adverse effect on road safety, and may leave the Council liable to claims.

Risks that may arise if the proposed decision is taken and actions that will be taken to manage these risks

- 59. There is a risk that, despite the operation of the procedures set out in the WHSIM, Skid Resistance Policy and other policies, there will still be incidents involving damage or injury on the highway network. It should be noted that any practical inspection regime cannot be expected to remove these risks completely. However, the proposed inspections and policies should reduce the risk considerably.
- 60. The WHSIM and Skid Resistance Policy will be reviewed from time to time to ensure that they are fit for purpose, and are effective in managing risks on the highway network. Where appropriate, revisions may be made to the policies.

Financial Implications

- 61. The review of the HIM and proposals for the WHSIM have taken into account current and likely future funding levels to ensure that the proposals are affordable.
- 62. It is considered that the standards proposed can be met, but that they should be reviewed from time to time to ensure they remain relevant should circumstances change significantly.
- 63. Authorities have legal obligations with which they need to comply, and which may be the subject of claims for loss or personal injury or of legal action by those seeking to establish non-compliance by authorities. It should be noted that in such cases, the Code of Practice may be considered to be a relevant consideration. Therefore, it is important that the Council's highway inspection regime and maintenance processes take into account the latest Code of Practice.

Legal Implications

64. The Council has a duty under the Highways Act 1980 to maintain the county's roads. The highway inspection procedures, policies and improvement plans ensure that this duty is fulfilled.

- of the Highways Act 1980 and for the purposes of Section 58, which provides for special defence, the Council undertakes inspections of the highway incorporating the carriageway, footway, grass verge and pathways upon which the public have a right of access and which are maintained at public expense.
- 66. Section 41 of the Highways Act 1980 imposes a duty on the Council, as Highway Authority, to maintain those roads, footways and cycle tracks that are 'highways maintainable at public expense'.
- 67. Section 58 of the Highways Act 1980 states that a statutory defence against third party claims is provided where the Highway Authority can establish that reasonable care has been taken to 'secure that the part of the highway to which the action relates' to a level commensurate with the volume of ordinary traffic such that it 'was not dangerous to traffic'.
- 68. Section 130 of the Highways Act 1980 places a general duty on the Highway Authority to 'assert and protect the rights of the public' in their lawful use of the highway.
- 69. Section 81 of the New Roads and Street Works Act 1991 (NRSWA) places duties on Utility Companies. Concurrent with a Highway Safety Inspection, any item of statutory undertaker apparatus or any utility reinstatement under guarantee, which the Highways Officer considers defective in accordance with the guidance in the Wiltshire Highway Safety Inspection Manual, will be recorded and reported to the appropriate Utility Company.
- 70. The Code of Practice is not statutory, but it does provide Highway Authorities with guidance on highways maintenance and management. Adoption of the recommendations within the Code is a matter for each Highway Authority, based on its own legal interpretation, risks, needs and priorities. The development of the new WHSIM has been undertaken in accordance with the requirements of the Code of Practice.

Options Considered

- 71. Not proceeding with the review of the HIM was considered not to be a viable option. There is a need for the Council, as highway authority, to conform to the requirements of the new Code of Practice in order to meet its duties as local highway authority.
- 72. The review of the HIM and the development of the WHSIM considered a range of options to determine the appropriate inspection regime and defect response procedures to manage the risks associated with the highway network.

Conclusions

73. The Council has reviewed its highways maintenance activities in view of the new Code of Practice 'Well-managed Highway Infrastructure', and has produced a Wiltshire Highways Safety Inspection Manual which it is proposed should be adopted by the Authority.

74. The review has included consideration of the Skid Resistance Policy and other highway maintenance policies. It is proposed to update these policies to reflect the new Code of Practice.

Parvis Khansari Director – Highways and Transport

Report Author:
Peter Binley
Head of Highways Asset Management
Peter.binley@wiltshire.gov.uk
31 July 2018

The following unpublished documents have been relied on in the preparation of this Report:

None

Appendices

Appendix 1 – Wiltshire Highways Safety Inspection Manual

Appendix 2 – Wiltshire Highways Risk Based Approach

Appendix 3 – Wiltshire Skid Resistance Policy

Appendix 4 – Wiltshire Highway Maintenance Policies

Appendix 5 – Wiltshire Highways Trees Inspection Policy