

Wiltshire Council

Malmesbury Area Board

13 March 2018

Subject: Road Surfacing Programme 2018/19

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

Key Decision: No

Executive Summary

The local highway network is vital for businesses and communities, and effective maintenance to ensure its availability is essential to the economic development of the county. Wiltshire Council recognises the importance of maintaining and managing its highway network effectively.

There has been under investment in highways maintenance nationally for many years. The significant investment of £21 million annually in recent years by Wiltshire Council has seen a large number of roads treated, with a substantial improvement in the overall condition of the county's road network (see **Appendix 1**).

The overall condition of Wiltshire's roads compares favourably with the national average and the south-west average road conditions.

The Council's approved capital budget for road surfacing and related work in 2018/19 is £16,139,000. It is proposed to carry out resurfacing and other treatments at over 100 sites this year (see **Appendices 2 and 3**), which vary in both size and type. There are also a large number of skid resistance sites to be treated this year, which are required in order to keep the roads safe. They consist of various treatments, including surface retexturing and resurfacing. The proposed expenditure in each area is broadly proportional to the lengths of road within the individual Area Boards.

A number of schemes have been identified which has not been possible to include this year, but which could be considered for implementation in future years. These have been listed for information, but at present it is not possible to state with certainty when it will be possible to treat them.

A budget of £2,500,000 has been included for carrying out smaller repairs at localised areas where safety defects are identified, or where road conditions are causing safety concerns.

With an extensive road network and aging infrastructure there is a need to plan for long term asset renewal. Good progress has been made on reducing the road maintenance backlog in recent years, but other highway assets, including street lighting, safety fences, road signs, footways and traffic signals will need investment to keep them safe in the future and to avoid expensive unplanned emergency repairs. The Council's new

Highways Infrastructure Asset Management System (HIAMS) will be used to develop a forward programme of resurfacing work for the next five years, to ensure value for money and use whole life costing for the highways asset.

Proposals

It is recommended that the Area Board:

- (i) Acknowledges that there has been a substantial improvement in the overall condition of Wiltshire's roads in recent years, but further investment is still required.
- (ii) Approves the highway maintenance scheme list for this community area in 2018/19 prepared for the Area Board.
- (iii) Notes that a new five year programme will be developed shortly, making use of the Council's new Highways Infrastructure Asset Management System (HIAMS), to ensure best value for money and whole life costing for the highways asset.

Reason for Proposals

The highway network forms the Council's largest asset, and it is important that it is maintained in the most cost-effective way that demonstrates value for money. This includes the use of asset management and whole life costing approaches to inform investment decisions.

Asset management principles have been applied for many years in Wiltshire to ensure that there is appropriate investment with longer term planning for the management of the highways assets.

Alistair Cunningham
Corporate Director

Wiltshire Council

Malmesbury Area Board

13 March 2018

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Key Decision: No

Purpose of Report

1. To provide information on the progress made in improving the condition of the county's roads, and advise on the road surfacing schemes to be undertaken in 2018/19.

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 local highway network in Wiltshire comprises over 4,400 kilometres of road and is vital for businesses and communities. Effective maintenance to ensure its availability is essential to the economic development of the county. Wiltshire Council recognises the importance of maintaining and managing its highway network effectively, and has been making a significant investment in improving the condition of its highway assets in recent years.
4. The condition of the county's roads is important to the public. This is demonstrated by the results of previous People's Voice surveys and the annual National Highways and Transportation (NHT) surveys, which indicate low levels of public satisfaction with road conditions nationally and in Wiltshire.
5. This report provides a summary of the progress to date on improving the condition of the county's roads, and the proposed road surfacing on the Council's current highway investment programme.

Main Considerations for the Council

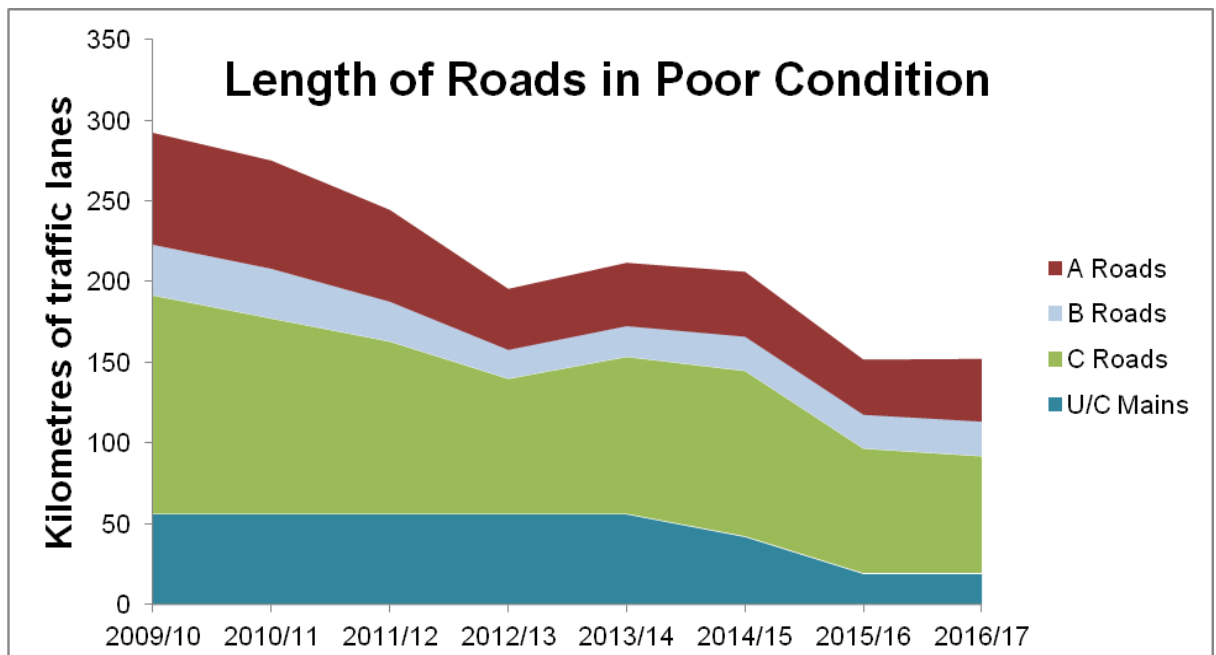
Local Highways Investment Fund 2014 – 2020

6. The 'Local Highways Investment Fund 2014 – 2020' was intended to address the longstanding under investment in highways maintenance and the consequent backlog, which has been a problem nationally for many years. The Council's major programme of investment in highway maintenance was originally proposed to be over six years to deliver a significant improvement in the condition of the county's highway network.
7. The programme has just completed its fourth year, and there has been a substantial amount of work completed, with an overall improvement in the county's road conditions. The investment was initially targeted at those roads in worst condition, especially the main roads, and the approach was expanded last year to include more preventative maintenance on the minor roads and renewal of footways.
8. Nearly all of the schemes in the 2017/18 programme have been completed. There have been a few minor roads which formed part of the surface dressing programme which have not been completed because of the need for particular equipment. These are being programmed for early next year. The programme of footway renewal and reactive carriageway repairs is currently being completed.
9. At the start of the investment programme it was intended that the investment should be used to improve approximately 664 kilometres of the network (about 15% of the total road length). As some of the roads will continue to deteriorate during this period a greater proportion of the network has to be treated to achieve the overall improvement target at the end of the period.
10. In the first year of the investment there were a number of sites which needed major reconstruction work and the lengths of road treated were less than originally envisaged. A substantial programme of surface dressing of mainly rural roads has been undertaken in recent years, and the total lengths of road resurfaced have increased considerably.

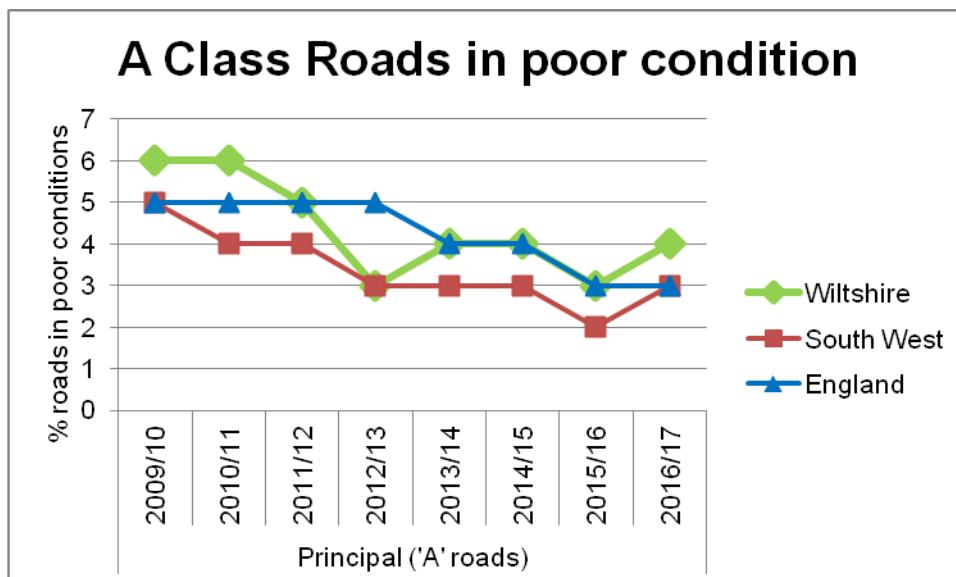
| Year | Length treated (kilometres) |
|--------------|-----------------------------|
| 2014/15 | 148 |
| 2015/16 | 182 |
| 2016/17 | 250 |
| 2017/18 | 181 |
| Total | 761 |

11. A total of 761 kilometres of road have been resurfaced since 2014, which is about 17% of the network. There have also been a significant number of smaller sites treated with hand patching and repairs to address localised areas in poor condition.
12. The detailed calculation of the backlog carried out by the Council's specialist consultants, WDM, indicates that there has been a significant reduction of 30% in the backlog since the start of the programme with the backlog reducing from an estimated £69.4 million to £48.2 million.

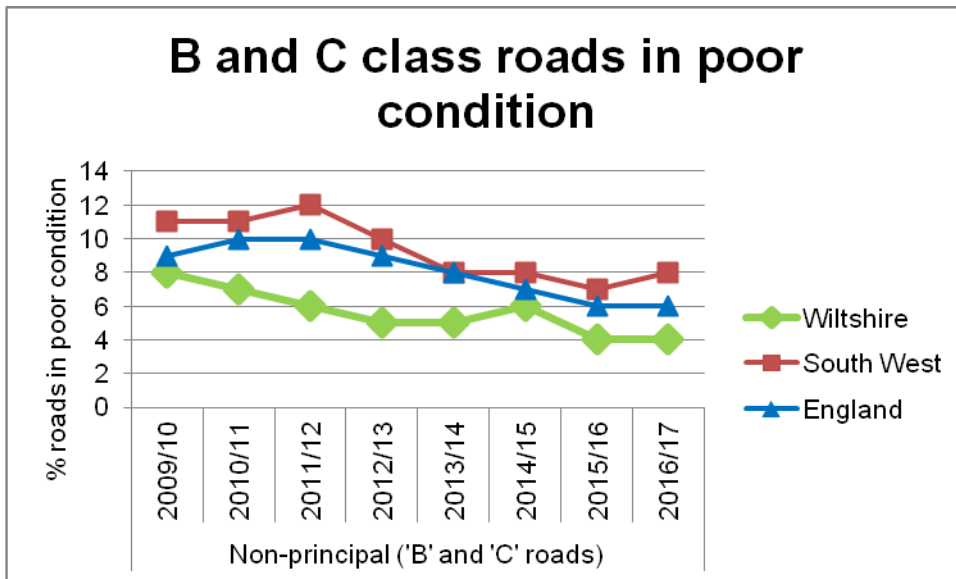
13. There has been a significant reduction in the length of road in Wiltshire in poor condition, which has almost halved since 2009. This has been largely due to the additional funding provided by the Council, especially in recent years through the Local Highways Investment Fund.



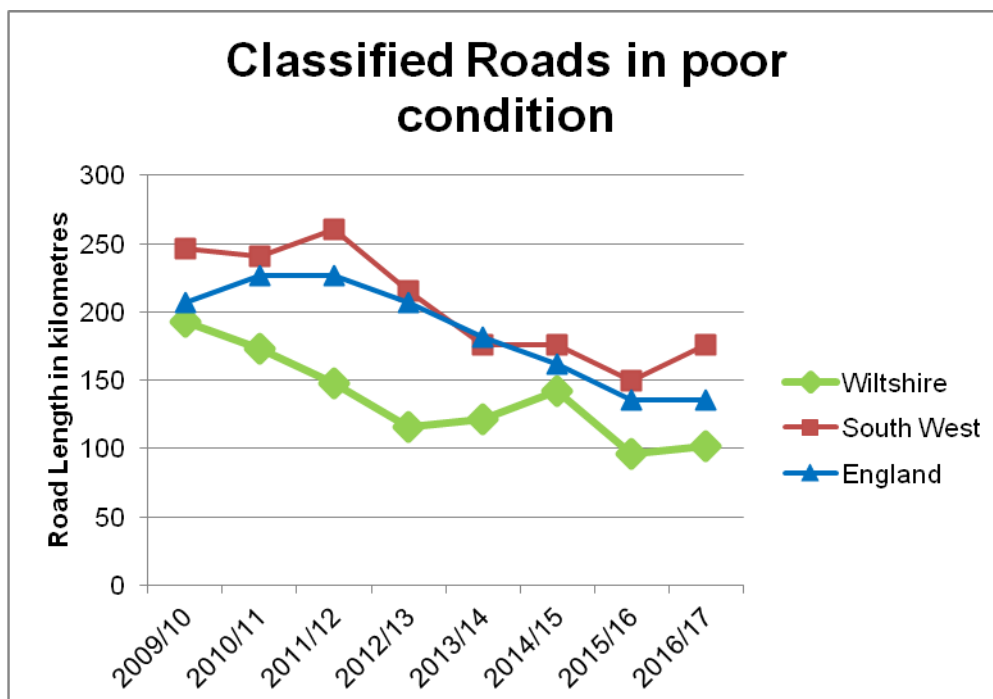
14. The condition of A roads has improved nationally since 2009 from 5% in poor condition to 3% in 2016/17 (Note - Low percentages are good). In Wiltshire the A class roads in poor condition have reduced by the same amount, but this year they have risen slightly above the national and south-west average at 4%.



15. The B and C class roads represent 45% of the road network by length in Wiltshire. This is a large proportion of the network. Keeping these roads in good condition is important to the local communities, and requires substantial investment.



16. The B and C class road conditions in Wiltshire are much better than the national and south-west averages, with 4% in poor condition, which is half the south west average of 8%, and better than the national average of 6% for these types of roads.
17. If the condition of classified roads (A, B and C class roads) in Wiltshire had followed the national or south-west averages, the roads would be in appreciably worse condition than they are now. The graph below shows the actual lengths of road in poor condition in Wiltshire by year, and what the lengths would have been if Wiltshire's roads were in the same condition as the national or south-west average condition (i.e. there would be more in poor condition).



18. The condition of the unclassified roads is more difficult to compare as the assessment methods are not necessarily consistent across authorities. In general terms the condition of the more important unclassified roads in Wiltshire compares well with those of similar authorities in the south west, but further assessment would be required to get a better understanding of minor road conditions across the south west.

19. Since 2009 the roads in Wiltshire, particularly the classified roads, have been improved more than those in the south-west, and they are in better condition than the national average.
20. The changing road conditions in each of the Area Boards between 2009 and 2017 are shown in **Appendix 1**. This is based on the road lane length considered to be in poor condition using the road condition survey data. The graphs show that overall there has been an improvement in all of the areas during that time.

Surfacing Schemes for 2018/19

21. The Council's approved capital budget for road surfacing in 2018/19 is £16,139,000, which is less than the £21,000,000 it has been in recent years. As a result it will not be possible to treat as many sites as had been originally envisaged. However, it is still proposed to carry out resurfacing and other treatments at over 100 sites this year (see **Appendices 2 and 3**).
22. The identified sites vary in both size and type. The proposed expenditure in each area is broadly proportional to the lengths of road within the individual Area Boards. A number of schemes have been identified which it has not been possible to include this year, but which could be considered for treatment in future years. These have been listed for information, but at present it is not possible to state when it will be possible to treat these sites.
23. There are also a large number of skid resistance sites to be treated this year, which are required in order to keep the roads safe. They consist of various treatments including surface retexturing and resurfacing.
24. A budget of £2,500,000 has been included for carrying out smaller repairs at localised areas. These repairs will be carried out where safety defects are identified, or where road conditions are causing safety concerns.
25. The Council carries out a large programme of highway drainage improvements funded from the highways maintenance budget to keep the roads safe and to protect the highway asset. Funding is also required to replace life-expired street lights, traffic signals, road signs and other highway infrastructure. A separate budget of £3,000,000 is provided for renewal, replacement and maintenance of the county's bridges and structures to keep them safe.
26. A substantial budget of £1,250,000 was included in 2017/18 for footway resurfacing and renewal, and a further £150,000 was made available for the Area Boards to prioritise footway improvements or maintenance. In view of the reduced budget for 2018/19 it has not been possible to include similar schemes in this year's programme, and generally footway works will need to be restricted to treating safety defects this year.

Future Proposals

27. The funding levels for road resurfacing and related work in Wiltshire have been proportionally higher than for most authorities in recent years because of the additional funding provided by this Council. The reduced budget in 2018/19 is likely to be a challenge as work is going to have to be increasingly focused on keeping the network safe, and there will be less scope for dealing with less urgent sites. Road safety on the network will continue to be the priority.

28. Progress on the six year programme identified in 2013 has been reported annually to the Area Boards, and the programme has been substantially completed. However, there are still a number of sites which were included in the original programme, or have subsequently been suggested for treatment, which have yet to be completed.
29. The Council's new Highways Infrastructure Asset Management System (HIAMS) will be used to help derive a future works programme to ensure best value for money and whole life costing for the highways asset. It is proposed that a new five year programme will be developed shortly, making use of the existing road condition data and predicted deterioration rates. The new system provides the opportunity to carry out more detailed calculations regarding road conditions and deterioration to inform investment decisions.
30. With an extensive road network and aging infrastructure there is a need to plan for long term asset renewal. Good progress has been made on reducing the road maintenance backlog in recent years, but further work is still required and other assets, including street lighting, safety fences, road signs, traffic signals and bridges, will need continued investment to keep them safe and to avoid unplanned emergency repairs in the future.

Safeguarding Implications

31. None.

Public Health Implications

32. The condition of roads and related infrastructure can have serious safety implications, especially with regard to skid resistance. Keeping roads in good condition can help with reducing accidents. Roads, bridges, highway structures, signs and street lighting need to be kept in good condition in order to protect the public and those maintaining the assets.

Corporate Procurement Implications

33. There are no procurement implications at this stage.

Equalities Impact of the Proposal

34. The improved maintenance of the highway network, its management using sound asset management principles, and good performance by the highways contractors, should benefit all road users, including public transport, and vulnerable road users such as cyclists and pedestrians.

Environmental and Climate Change Considerations

35. The effects of climate change could be significant for the highway network. There was considerable damage to the roads, footways and drainage systems in the flooding of 2014, and such events could be repeated. Having robust maintenance and investment strategies to improve the condition of the network helps build resilience into the highway network and the infrastructure.

36. Where possible, suitable materials arising from road resurfacing schemes are recycled. Large quantities of road planings are used on rights of way to repair damage and on county farms, or provided to community groups. The presence of tar bound materials in older carriageways has caused problems on some sites as it has to be disposed of as contaminated waste, with consequent cost implications. Options for in-situ and other recycling processes are being progressed where viable in order to increase the recycling of highway materials.
37. The use of 'warm' asphalt for surfacing on the network in Wiltshire has increased significantly in recent years. The material has proved durable and the process produces less carbon than traditional methods.

Risk Assessment

38. The application of good asset management principles, the planned maintenance of the highway infrastructure, and the establishment of formalised asset management policies help reduce the risk of incidents and claims.

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

39. There is a risk of increased collisions, claims and public dissatisfaction if highway maintenance is not carried out. The principles of asset management have been followed by this Council for many years, and there is a need to continue to demonstrate best practise and obtain best value for money. Future DfT funding will be dependent on demonstrating the application of good asset management principles. Failure to do so will result in reduced funding in future years.

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

40. It is important to ensure that highways asset management and service delivery are implemented effectively. Processes are currently in place with Service Delivery Teams managing the various aspects of the highway service, and these are the appropriate groups to continue to manage the associated risks. The teams include representatives from the Council, consultants and contractors involved in carrying out the works, and they report to the Contract Management Meeting comprising senior managers from those organisations.

Financial Implications

41. The highway network and related infrastructure forms the Council's largest asset, and has a replacement value of over £5 billion. It is important that it is maintained in the most cost-effective way in order to obtain value for money. This includes the use of a whole life costing approach to inform investment decisions on highway maintenance.
42. The capital budget for 2018/19 will be £16,139,000, which is less than the £21,000,000 available in recent years. The current surfacing programme has been developed on the basis of the approved budget.

43. The increasing drive for asset management from DfT will mean that failure to demonstrate the application of this approach will result in reduced funding from central government through the incentive fund. It is therefore important to meet the requirements of the incentive funding self assessment, and measures are in place to ensure this.

Legal Implications

44. The Council has a duty under the Highways Act to maintain the county's roads. The highway inspection procedures, policies and improvement plans ensure that this duty is fulfilled. The investment and improved road conditions in recent years is helping the Council meet its responsibilities with regard to road maintenance.

Options Considered

45. The recent investment in highways maintenance has seen a substantial improvement in the condition of the county's roads, which are in better condition than the south west and national averages.
46. The proposed scheme list for 2018/19 has been developed based on the condition data and local knowledge and is considered to represent a realistic programme in view of current funding levels.
47. There is a need to continue to apply asset management principles to the highway network and to ensure the performance of the contractors involved in delivering the service is good in order to keep the network in good condition and to ensure value for money.

Conclusions

48. The highway network forms the Council's largest asset, and it is important that it is maintained in the most cost-effective way in order to show value for money. This includes the use of whole life costing approaches to inform investment decisions.
49. The 'Local Highways Investment Fund 2014 – 2020' has provided the opportunity to address the longstanding under investment in highways maintenance, which has been a problem nationally for many years. The significant investment of £21 million in previous years by Wiltshire Council has seen a substantial improvement in the condition of the highways network.
50. A programme of road resurfacing for 2018/19 has been identified, based on safety needs and the need to improve the condition of the highway network and related assets.

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March 2018

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

None

Appendices

Appendix 1 – Road Conditions by Area Board 2009 to 2017

Appendix 2 – Surfacing Scheme List 2018/19

Appendix 3 – Map of Surfacing Sites 2018/199