

Wiltshire Council

Cabinet

22 October 2013

Subject: Investing in Highways

Cabinet Member: John Thomson - Deputy Leader and Cabinet Member for Highways and Streetscene and Broadband

Key Decision: No

Executive Summary

The Council is responsible for the maintenance of roads in Wiltshire, with the exception of motorways, trunk roads and those in private ownership. The highway network represents the Council's biggest asset, and possibly its most significant potential liability.

Public satisfaction with the condition of the roads in Wiltshire is low, and there is a backlog of maintenance required on the network. In order to improve the condition of the county's roads, various options have been considered.

Option 1 would be an annual expenditure of £12.575 million, excluding inflation, which would maintain the highway network in its existing condition for the next 15 years by treating about 131 kilometres annually. Spending less than this would result in road conditions deteriorating and public satisfaction reducing.

Option 2 would be to increase expenditure to £17.000 million for six years, which would enable approximately 185 kilometres of the roads in worst condition to be surfaced annually, and would improve 408 kilometres (9.2%) of the network by 2020. There would be the opportunity to involve the Area Boards in setting local priorities on the minor roads. This option would result in a moderate improvement to the condition of the roads.

Option 3 would be to increase expenditure to £21.021 million for six years, which would enable approximately 238 kilometres of road to be surfaced annually, and would improve 664 kilometres (15%) of the network by 2020. There would be the opportunity to involve the Area Boards in setting local priorities on the road network. This option would result in a significant improvement to the condition of the roads.

Treating all roads on the network which are in poor or fair condition would improve road conditions considerably and was considered as Option 4, but this would be enormously expensive, costing over £100 million annually for a number of years, and it was concluded that this would not be a realistic option.

Proposals

It is recommended that:

1. To achieve the objective set out in the Council's Business Plan a project for improving Wiltshire's roads should be undertaken by increasing annual expenditure on road maintenance to £21.000 million for six years from 2014/15.
2. The level of future funding from the Local Transport Plan Maintenance Block Capital Grant is a major risk in the proposed highways road maintenance investment. Not until future year allocations are published will the true financial implications of investments be known. It would be prudent to reassess the financial implications once these are known and during the annual budget setting process.
3. The Area Boards should be involved in helping to set local priorities for roads to be treated, with the details of the process to be agreed by the appropriate Service Director in consultation with Cllr Thomson, the Cabinet Member for Highways and Streetscene and Broadband.

Reason for Proposal

The county's roads are important to the public, as demonstrated by the results of the Council's People's Voice 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 road maintenance is a service where the public consistently wish to see more spent.

The experience of other Authorities who have made substantial investments in highways maintenance recently is that improvements in the condition of the network are apparent, and public satisfaction is increased.

The proposed additional investment in the county's roads would improve those roads in worst condition, especially the minor roads, and would improve road safety.

The project would provide the opportunity for the involvement of the Area Boards in identifying local priorities, which has not been possible previously because of the need to focus expenditure to treat identified safety issues.

A programme of publicity and branding of the project would make it clear to the travelling public, businesses and residents that Wiltshire is improving the condition of its roads.

Parvis Khansari
Service Director – Highways and Transport

Wiltshire Council

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Cabinet Member: John Thomson - Deputy Leader and Cabinet Member for Highways and Streetscene and Broadband

Key Decision: No

Purpose of Report

1. To approve a programme of investment in road maintenance to improve the condition of the highway network in Wiltshire.

Relevance to the Council's Business Plan

2. The Council's Business Plan sets out the vision to create stronger and more resilient communities. It includes three key priorities and twelve actions that the Council will deliver over the next four years. One of the twelve actions is to 'invest additional money between 2014-17 to reduce the historic backlog in highways maintenance'. The recommendations of this report will facilitate the delivery of this action, which is an important part of the Business Plan.

Background

3. The Council, as highway authority, is responsible for the maintenance of roads in Wiltshire, with the exception of motorways, trunk roads and those in private ownership. The highway network represents the Council's biggest asset, and possibly its most significant potential liability. Maintaining a fit for purpose highway network is crucial to support economic recovery and to ease the movement of goods and people.
4. The highway network in Wiltshire comprises 4,400 kilometres of road, 3.9 million square metres of footway, 981 bridges and over 40,000 street lights. The replacement value of the roads alone is £4.5 billion, and it would cost over £330 million to resurface all of the roads, with additional costs to repair structural damage.
5. Expenditure on highways maintenance has varied enormously over the years. During the 1990s funding for road maintenance reduced nationally, and consequently a backlog of maintenance developed on the nation's highway network. Investment since 2000/01 has improved overall road conditions, but this has still not been sufficient to keep all of the roads and footways in good condition.

6. The condition of the county's roads is important to the public. This is demonstrated by the results of the Council's People's Voice 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 the service where the public consistently wish to see more spent.
7. The Council applies the principles of asset management to the maintenance of the highway network. This involves developing lifecycle plans to demonstrate how funding and performance requirements are achieved through appropriate intervention and investment strategies, with the objective of minimising expenditure while providing the required performance. This report considers the options for future highway maintenance investment.

Main Considerations for the Council

8. The Council carries out regular technical surveys on the condition of its road network, which are used to inform maintenance decisions (see **Appendix A**). Road safety is the priority, and having adequate skid resistance on high speed roads has been a focus for investment. The condition of the network has been improving in recent years and the Council has continued to appropriately invest in highway maintenance, despite the difficult financial situation.
9. Members of the public, Town and Parish Councils, the Area Boards and others often make suggestions regarding roads in need of surfacing. In some cases these requests arise as a result of uneven or bumpy road surfaces causing poor ride quality or an unsightly appearance. Sites with serious skid resistance deficiencies, or with serious structural failure, may not be as obvious to road users, but are of greater concern to the Council, as highway authority responsible for the safety of the network.
10. The recent severe winters and flooding have had a serious impact on the highway network, with road conditions in a number of locations deteriorating sooner than originally anticipated. As a result, the schemes and priorities have had to be reassessed and adjusted annually to take account of the changing conditions. At existing funding levels it has not been possible to resurface all of those roads which may be unsightly or have a poor ride condition, and the priority has been to address those sites where there are serious road safety concerns.
11. The overall trend in Wiltshire over the past decade has been to see a gradual overall improvement in carriageway conditions year on year. However, at current rates of expenditure it is going to take many years before the current maintenance backlog is completely removed. This means that public satisfaction is likely to remain low because it is only possible to carry out a proportion of the work considered desirable each year, and this is likely to remain the case for the foreseeable future at current funding levels.
12. The road maintenance programme this year will improve the road conditions, but it is still anticipated that in 2014 about 664 kilometres of the highway network will still be in poor condition. This represents 15% of the network. The majority of roads in poor condition are unclassified roads, especially the minor urban roads where generally the safety issues have not been as great as on the high speed main roads and, consequently, they have been a lower priority for investment.

Public Support for Increased Investment

13. The Peoples Voice surveys carried out by the Council have shown consistently over the years that road maintenance is a service area where the public think the Council should be spending more, and this view is reflected across each of the Community Areas. In the 2012 Peoples Voice survey 67.6% of respondents wanted to see more spent on road maintenance. This was the Council service which the majority of the public wanted to see more spent on.
14. The Council's Peoples Voice and the NHT surveys have indicated low levels of public satisfaction with road conditions nationally. The latest NHT survey indicated that in Wiltshire 31% were very dissatisfied and 31% fairly dissatisfied with road conditions, which was very close to the national average.
15. The satisfaction levels in Wiltshire have shown little variation since the NHT survey started in 2008, but overall the national satisfaction levels with road conditions have been declining. Consequently, the sustained investment in road maintenance in Wiltshire has significantly improved the county's ranking in the public satisfaction tables from near the bottom to being close to the middle.

Experience from Other Authorities

16. A few highway authorities have already started making significant investment in highways maintenance, and have reported benefits in terms of better road conditions and improved public satisfaction. Officers have reviewed these schemes, including visiting some of the authorities involved in order to understand the potential benefits and problems in connection with increased investment in highway maintenance.
17. Hampshire County Council has a larger road network than Wiltshire of 8,500 kilometres, compared to 4,400 kilometres, but otherwise has a fairly similar highway network. An investment of an additional £10 million annually for seven years through prudential borrowing is now in its third year in Hampshire, and officers and members have already seen an improvement in road conditions and public satisfaction. The NHT survey indicates that 35% of residents in Hampshire are very or fairly satisfied with conditions, compared to the national average 26% in county councils, and 25% in Wiltshire.
18. Private Finance Investment (PFI) schemes have been a means of providing large investment in road maintenance, but only a small number of schemes have been accepted for funding. Portsmouth City Council has benefited from a PFI scheme to address road conditions, and the improvements are reflected in the NHT survey results which show 53% very or fairly satisfied with road conditions, which is a very high satisfaction level compared to other authorities.
19. Cheshire West and Chester Councils have a 'Highway Recovery Plan' which resulted in a commitment of £100 million additional capital investment over a ten year period. Although only two years into the investment period, these councils are already able to report improvements in network condition, reduced levels of complaints and claims, and more importantly improved levels of customer satisfaction.

20. The experience of other authorities who have made substantial investments in highways maintenance recently is that improvements in the condition of the network are apparent, and public satisfaction is increased.

Options

21. The technical surveys of the conditions of Wiltshire's roads provide good verifiable information on identifying carriageways in poor condition, and the information enables maintenance programmes to be prepared. In order to predict the longer term carriageway maintenance requirements and expenditure levels it has been necessary to model the deterioration of the network, taking into account its existing condition and anticipated rates of deterioration.
22. Assessment work has been carried out by the Council in conjunction with Atkins, the Council's Highway Consultant, and WDM, the specialist company which carries out the technical surveys of carriageway conditions for Wiltshire and a number of other south west highway authorities. The options considered have included continuing funding at close to existing levels, and increasing investment to reduce the maintenance backlog.
23. The modelling work carried out by WDM made use of costs and prices from the Council's new Highways and Streetscene contract, and used deterioration rates derived from detailed work that WDM have undertaken on carriageway deterioration recently with other highway authorities. The assessment has been confirmed by work carried out by Atkins using the Highways Maintenance Efficiency Programme toolkit which includes a spreadsheet that allows investment options to be considered. At this stage no allowance has been made for inflation or cost changes in future years because of the uncertainty associated with such predictions.
24. The assessments have been carried out for a period of 15 years from 2014, and take into account the maintenance being carried out on the network this year. There is some uncertainty about maintenance requirements beyond 2029. Initial indications are that the lengths of road deteriorating into poor condition will increase slightly with a need for higher levels of expenditure to maintain conditions after 2029. It was considered that because of this uncertainty an assessment period of 15 years would be appropriate to compare the options.
25. There is a large range of options possible for increasing investment, but in order to simplify the assessment process four possibilities have been considered, and three of these compared in more detail. Other options, or variations of these funding profiles, could be considered in the next stage of development. These could include the investment taking place over a shorter or longer period than has been assumed with these options.

Option 1 – Maintain existing conditions

26. It is estimated that an average annual expenditure of £12.575 million, excluding inflation, would be required to maintain existing carriageway conditions for the next 15 years. This would treat about 131 kilometres of the network annually, and keep the lengths of road in poor condition on the network at 664 kilometres. This level of expenditure would ensure that future deterioration is dealt with at a rate sufficient to ensure that there is no overall increase in the amount of road in poor condition.

27. It is unlikely that with this level of funding any significant improvement could be achieved to the condition of the unclassified roads without having an adverse effect on the condition of the classified roads. With this option the majority of the investment would need to remain focussed on the classified roads in order to keep them in safe condition. Investment decisions would be driven by the technical information, with little scope for the Area Boards or public to be involved.
28. At the end of the 15 year assessment period in 2029 the overall condition of the network would be very similar to its present condition. Some of the roads currently in poor condition would have been improved, but equivalent lengths of the network would have deteriorated into poor condition.

Option 2 – Increase Investment to £17 million for six years

29. The backlog of carriageway in poor condition could be reduced by increasing annual expenditure on road maintenance to £17.000 million excluding inflation, for six years. In subsequent years the expenditure to keep the roads in the improved condition is uncertain because it will depend on the rate of deterioration, but is likely to be in the region of £12.000 million, excluding inflation. The length of road in poor condition is predicted to be reduced by 440 kilometres by 2020, and then maintained in that condition until the end of the assessment period.
30. This option would address the very worst sections of road on the network. The majority of the additional investment would be on the unclassified urban road network, with some on the 'A' road network to address developing structural issues. This option would improve about 10% of the network by 2020, by resurfacing about 185 kilometres of road annually during the six years. There would remain some areas of carriageway where there is deterioration, but which has not yet reached the 'red' condition.
31. There would be scope for the involvement of the Area Boards in identifying priorities with this option, especially on the unclassified minor roads, enabling the Council to deal with some of the roads which are considered by the public to be in worst condition in their area.

Option 3 – Increase Investment to £21 million for six years

32. The condition of the highway network could be improved significantly by increasing annual expenditure on road maintenance to £21.021 million, excluding inflation, for six years. In subsequent years an expenditure in the region of £12.000 million, excluding inflation, would be required to keep the network in the improved condition until 2029, but this would depend on the rate of deterioration experienced during this period.
33. The length of road in poor condition would be reduced by 664 kilometres by 2020, and the network would be kept in this overall condition until 2029. This would be achieved by resurfacing approximately 238 kilometres of road annually during the six years. There would be an improvement in the condition of the unclassified roads where almost 400 kilometres of road would be improved. The investment would include an improvement in the structural condition of 16 kilometres of 'A' class roads so that they can take the heavy traffic loads, and improved skid resistance on 220 kilometres of classified roads.

34. There would be a substantial opportunity for involving the Area Boards in prioritising sites for treatment in their local area. The increased funding would provide flexibility in the order in which schemes can be carried out. It would be sufficient to carry out the necessary safety schemes, and provide scope to deal with those sites where ride quality or appearance are important to the public.

Option 4 – Increase Investment so that all roads are in Good Condition

35. Consideration has been given to bringing all of the county’s roads up to a good or very good condition by removing all areas of deterioration on the network. This could be achieved by treating the roads in fair condition as well as those in poor condition. This would mean treating the roads in ‘red’ condition and a large proportion of those currently in ‘amber’ condition.
36. The initial modelling of this option shows that enormous expenditure of over £100 million annually would need to be spent for a number of years to get all of Wiltshire’s roads into a good or very good condition.
37. In view of the current financial affordability it is considered that this level of investment would be unrealistic, and this option has not been investigated further.

Comparison of Options

38. Expenditure annually of less than £12.575 million over the 15 year assessment period would result in deteriorating road conditions, with a consequent reduction in public satisfaction. In order to improve the road conditions and public satisfaction the funding would need to be above this level.
39. The three options identified have been compared (see **Appendix B**), and the main differences are summarised below:

	Funding	Average length of road treated annually	Change in Road conditions between 2014 and 2020. Length in better condition.
Option 1	15 years at £12.575m	131 kilometres	0 kilometres
Option 2	6 years at £17.000m and 9 years at approx £12.000m	185 kilometres	408 kilometres
Option 3	6 years at £21.000m and 9 years at approx £12.000m	238 kilometres	664 kilometres

40. Option 3 would require £44.769 million more of expenditure over the 15 year assessment period than Option 1, which would effectively remove the current maintenance backlog. Option 2 would require an additional £19.071 million compared to Option 1. These estimates are at present day prices and do not include inflation.
41. The three investment strategies were modelled to determine the lengths of different road types likely to benefit from treatment during the initial six year investment period using the estimated deterioration model. The three options would treat significantly different lengths of road during the six year period as shown on the summary table. The actual benefits achieved may vary compared to those currently estimated because of the possibility of severe weather, especially during the winter or because of flood damage. The assessments have been undertaken based on the typical average expected deterioration in road conditions.
42. Option 1 would only treat sufficient roads to ensure the overall condition remained unchanged between 2014 and 2020. There would be little change from the existing carriageway conditions, no significant increases skid resistance on the roads and no anticipated improvement in public satisfaction levels.
43. Option 2 would improve a large proportion of the roads on the network currently in poor condition by 2020 by improving the worst areas during the first six years. It would provide a significant improvement to the condition of the unclassified roads, which is a part of the network where there has been under investment in recent years compared to the classified network.
44. Option 2 would only make a small improvement to the structural condition of the 'A' roads, and there would be little overall improvement in the skid resistance of the classified roads. There would be a large improvement in the condition of the unclassified roads, but the initial modelling shows there may be a slight reduction in the condition of the 'C' roads. If this option is adopted the strategy could be adjusted to maintain the 'C' road conditions by reducing the length of unclassified roads improved.
45. Option 3 would improve nearly all of the roads on the network currently in poor condition by 2020 by improving about 15% of the network during the first six years. It would provide a significant improvement to the condition of the unclassified roads. It would also address structural issues on the 'A' roads by strengthening vulnerable sections, and would increase skid resistance at key safety locations by resurfacing significant proportions of the classified roads.
46. Option 3 would be likely to improve public satisfaction the most by treating a larger extent of the highway network than the other options, and by providing more scope for the involvement of the Area Boards and the public in setting local priorities. However, it is more expensive than the other options.
47. Options to increase investment in highways maintenance above the £21 million suggested in Option 3 would be beneficial and would enable more of the network to be treated, but they would be treating mainly the roads classed as being in 'amber' condition rather than 'red'. It would be expected that this additional expenditure would have less additional effect on public satisfaction as the public appear to be particularly concerned about those roads in poor condition, rather than those in fair condition.

48. Option 3 would provide the greatest potential improvement to road safety by improving the skid resistance on the classified network. Both Options 2 and 3 would improve the condition of the unclassified urban roads, but these roads generally do not have poor accident records.
49. Options 2 and 3 would have benefits for residents, especially in the urban areas, as they would improve running surfaces, potentially resulting in less noise and disturbance associated with damaged and uneven road surfaces.
50. With Options 2 and 3 the lengths of road in poor condition would be treated, although it would be expected that there would still be some small isolated areas where weather, ground conditions, public utilities or other damage may be apparent, but these would generally be small and easier to deal with than at present. The roads would not be in perfect condition, but they would be in significantly better condition than they are at the moment.
51. The lengths of road to be treated with each option are based on estimates using the assumed deterioration rates. In reality the actual lengths treated each year may vary as the deterioration rates may vary and the priorities may need to be changed during the implementation of the project. The uncertainty over deterioration rates in carriageway conditions, especially on an improved network, make future funding levels beyond 2020 difficult to predict with certainty, and these will need to be reviewed as the project develops.

Next Stages

52. In order to progress the project it will be necessary to carry out more assessment work on the road conditions and skid resistance of the network based on the surveys currently underway. This will enable sites for treatment to be identified, taking into account not only the Council's skid resistance policy and safety considerations, but also the opportunity for improving the overall condition of the network.
53. If additional investment is made in road maintenance it would be possible to consult the Area Boards to identify the sites that in their view are the local priorities. It would be necessary to be realistic about what could be achieved each year, but there is the possibility of some form of local consultation, which has been difficult previously because of the need to use the available funding to meet the overriding safety considerations on the network.
54. The Council obtained up-to-date prices for this type of work when the Wiltshire Highways and Streetscene contract was tendered last year. This large contract has the benefit of obtaining efficiencies and price savings through the large workload, shared overheads, and long term commitment of the supply chain. The situation will be kept under review, and if it is considered beneficial it would be possible to retender elements of the highways resurfacing work. However, with rising expenditure on highways nationally, rising costs, and the potential inefficiencies of smaller contracts it would need careful consideration.

55. In order to ensure that there is a clear understanding by the public about what the Council is seeking to achieve, and to publicise the works, it would be desirable to brand the road resurfacing under a common banner, which would make it clear that the aim of the project is to improve road conditions. The publicity and communications strategy would be developed in detail as part of the scheme.

Safeguarding Considerations

56. There are no applicable safeguarding considerations.

Public Health Implications

57. Increased investment in road maintenance will have benefits for public health. The improved road surfaces, better skid resistance and associated safety improvements would help reduce the numbers killed and injured on the road network. These improvements would complement the other measures to improve road safety, such as traffic calming and speed limits, being introduced through the Local Transport Plan funding and the Community Area Traffic Groups.
58. The improved road surfaces, particularly on the minor urban roads, would be of benefit to cyclists and pedestrians, and with suitable publicity campaigns could be used to encourage these healthier means of transport. At present, the condition of some of the urban roads may discourage cycling as cyclists are adversely affected by poor road conditions and uneven or damaged surfaces. The proposed investment would support the strategy to encourage cycling as set out in the Local Transport Plan.
59. Roads in poor condition in urban areas can result in disturbance and noise for residents, especially on busier routes carrying heavy goods vehicles at night. Better road surfaces could result in reduced background noise in residential areas, with potential mental and physical health benefits.
60. The Council monitors road collision data in order to focus safety improvements at those sites with the worst accident records. With the additional funding this process will continue, and where appropriate other alterations to signing, drainage, street lighting or road markings could be incorporated into resurfacing work to improve safety.

Environmental and Climate Change Considerations

61. The road network is particularly vulnerable to the effects of climate change. In recent years we have seen the effects of a series of severe winters which have resulted in damage to the roads and an increase in the number of potholes. Last year was the second wettest on record and flooding damaged a number of roads in Wiltshire. In long periods of hot weather the surfaces can be damaged by melting, resulting in roads becoming slippery or deforming under traffic loads.
62. Roads in good condition are less vulnerable to the effects of extreme weather. Frost and flood damage is most severe where there is already a weakness in the road surface and structure, which can then be aggravated by the effects of the weather. By increasing expenditure on road maintenance, the county's road network would be made more resilient to climate change.

63. Increased investment in road maintenance would initially increase the energy consumption of the highways service, and would increase the carbon footprint because of the nature of the materials used, which are predominantly oil based and involve considerable transport elements.
64. In the longer term a more robust highway network, with roads in better condition, would require less reactive maintenance and reduced travelling to respond to potholes and localised defects. A planned maintenance regime would enable the traffic disruption to be kept to a minimum. With unplanned maintenance the delays to traffic and associated fuel consumption could be considerable.
65. The use of recycling in road construction has increased in recent years. However, the existing road materials are often not suitable for use on the top surface of the road because of the need to provide adequate skid resistance and this can often only be achieved with the use of specially quarried materials. It is anticipated that there will be limited scope for large scale recycling in the road surfacing with this project, which is predominantly involved in resurfacing the roads.
66. For many years the Council has re-used suitable road planings on rights of way to bring them up to a safe condition, and this would continue with the current proposals. Previous trials have been carried out to use processes to treat road planings so that they were suitable for use in footways as base materials or to repair verge damage. With the quantities likely to be available, it is anticipated that this will be progressed with the current proposals.

Equalities Impact of the Proposal

67. The improvements in road safety anticipated with increased investment in road maintenance would be expected to benefit all road users, but especially the more vulnerable, including pedestrians, cyclists and other non vehicle users.
68. The involvement of the public through the Area Boards in the setting of local priorities has the possibility of greater community involvement in this important area of the Council's services, and will help promote the role of the Area Boards, helping to build cohesive communities.
69. The highway network is important to local businesses, and to public transport operators. The delays due to un-programmed maintenance and road repairs have been identified as concerns by local businesses. The high profile programme of works to address road conditions will help send the message that transport is important in Wiltshire and could help to promote inward investment and job creation.

Risk Assessment

70. 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 the Council has approved highway inspection and skid resistance procedures in place, but in order to keep the network in safe condition it is important that the highway network has adequate investment.

71. The road condition data collected through the technical surveys is used to focus investment on those sites where there is most need and greatest risk. As well as the safety benefits this approach also ensures that best use is made of the limited available funding in order to keep the asset in optimum condition.

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

72. If additional investment is not made in road maintenance, or if funding levels are allowed to decline, which has been the case with many local authorities recently, it is likely that road conditions will deteriorate, accidents will increase, and public satisfaction will decline further.
73. The risks to the Council from lack of road maintenance are in terms of claims against the Council as the result of accidents, or in extreme cases prosecution as a result of particular incidents. As well as the safety and cost aspects, there are also significant reputational implications of such events.
74. Public satisfaction with road conditions is generally low nationally, except in those authorities where there has already been substantial investment. In Wiltshire the surveys indicate a public wish for greater investment in highway maintenance. If this investment is not made it could give the impression that the community's views are not important to this Council.
75. Not investing in highway maintenance is likely to lead to declining public satisfaction in the future as road conditions remain the same and no progress is made on improving them.

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

76. There is a risk that the proposed investment will not deliver the improvements in road condition anticipated. This risk will be managed by using the technical data to focus the necessary investment on those sections of road where work is required to meet safety requirements, and on those places where it would improve road conditions the most. Effective asset management will reduce this risk and make sure the investment is effective.
77. There is a risk that the investment will not increase public satisfaction with the service. In view of the initial results from those authorities which have made a substantial investment it would appear that satisfaction levels will improve with the investment. However, a programme of publicity, branding and public involvement through the Area Boards will help raise awareness of the project, and will help to reduce this risk.
78. Future rates of deterioration of the network are uncertain and depend on weather conditions, and may not be as anticipated. In order to reduce the risk of damage caused by weather the sites to be treated will be reviewed annually, and where necessary adjustments will be made to the scheme lists in order to ensure that the maintenance is effective to meet safety requirements. The programmes will be reported through the Community Area Highway Information documents which are available on the Council's website for each Area Board.

79. The costs associated with the programme have been based on present day prices because of the uncertainty over future inflation levels in the longer term. In the event of high inflation, or specific price increases in road maintenance, it may be necessary to review the project to determine whether it will still be realistic to achieve the targeted improvements, or whether expectations should be changed. It is proposed that the management will review the project regularly through the Service Delivery Team process to report any significant changes.

Financial Implications

80. The majority of funding for road maintenance is provided through the Maintenance Block Capital Grant from the Department for Transport (DfT). The allocations for the grant have been confirmed up until the financial year 2014/15, in which the Council will receive £12.262 million. Beyond this financial year there is uncertainty about the level of grant that Wiltshire Council will receive; although in the latest Comprehensive Spending Review (Spending Review 2013) the Government announced that the DfT Capital budget will rise to £9.5 billion, indicating potential for allocations to increase. As there is uncertainty around the DfT grant, the financial appraisal of the options has been calculated on a number of different grant funding levels from the DfT. The different grant levels are:

- (i) Remains at £12.262 million
- (ii) Increases to £14.000 million
- (iii) Increase to £16.000 million

81. An element of the Maintenance Block capital grant is allocated to bridge enhancement works. As part of the financial appraisal it has been assumed (by officer recommendation) that this allocation will remain at £3.000 million per year, in line with the current bridge works programme. This is sufficient to maintain the bridges in their current good condition, so no further sums above this are required.
82. A financial summary of the three options highlighted within the report is detailed in the table below:

Table 1: Additional revenue Investment required to fund investment options

Option	LTP Allocation £ million	Additional revenue budget to fund borrowing requirements					Total Budget Increase £ million
		2014/15 £ million	2015/16 £ million	2016/17 £ million	2017/18 £ million	2018/29 £ million	
1	12.262	0.024	0.160	0.160	0.208	4.494	5.046
	14.000	0.024	0.122	0.000	0.000	2.177	2.323
	16.000	0.024	0.079	0.000	0.000	0.000	0.103
2	12.262	0.121	0.795	0.795	0.843	3.579	6.133
	14.000	0.121	0.757	0.546	0.594	1.393	3.411
	16.000	0.121	0.714	0.259	0.307	0.000	1.401
3	12.262	0.208	1.372	1.372	1.420	3.870	8.242
	14.000	0.208	1.334	1.123	1.170	1.648	5.483
	16.000	0.208	1.291	0.836	0.883	0.000	3.218

*All figures in the table above are calculated on the basis that £3.000 million of the Maintenance Block Capital Grant is allocated to Bridge works.

83. The above financial modelling has been undertaken using the highway maintenance budgets contained within the approved 2013/14 to 2016/17 Capital Programme. This allows for some additional Council funded highway maintenance budgets above and beyond the Maintenance Capital Block Funding allocation. The additional borrowing has been approved in the 2013/14 capital programme and so the financing of the borrowing is included within the Council's financial plans. This is a known commitment and separate from any additional funding proposed in this report.
84. It has been assumed that any borrowing required to fund highway capital expenditure will be paid back over a ten year period. The interest payable on the required borrowing has been calculated using a 4.35% interest rate.
85. Option 1

With the funding requirement being the lowest of all the three options this incurs the least additional revenue funding in future years. If the Maintenance Capital Block Funding allocation remained at the same level this option would require a total of £5.046 million investment over the 15 year appraisal period with relatively small growth required in the next three financial years. The total growth required reduces to £2.323 million if the grant funding allocation increases to £14.000 million. If the grant allocation was to rise to £16.000 million there would only be a borrowing requirement in the 2014/15 financial year and hence additional revenue funding required only in the financial years of 2014/15 and 2015/16. Under this scenario, there would be surplus grant in the years from 2015/16 onwards which could be allocated to further highway works (at no further revenue cost) or used to offset borrowing elsewhere in the capital programme and reduce the revenue funding requirement for borrowing of the Council in future years.

Option 2

All three funding scenarios require additional revenue funding in future years. The DfT grant at current levels would require an investment of £6.133 million over the 15 years compared to an investment of £1.401 million should the grant allocation rise to £16.000 million.

Option 3

This option requires the highest level of future investment; not only over the 15 year period but also within the first 3 financial years. If the grant was to remain at £12.262 million a £8.242 million investment would be required. If the grant allocation was to rise to £16.000 million there would be an investment requirement of £3.218 million. This option places considerable financial pressure on the revenue budgets in future years.

86. The importance of highways investment has been recognised within the Wiltshire Council Draft Business Plan 2013/17 and, as a result, an intention to invest additional Capital budget was factored into the financial plan. This is included as a proposal to increase revenue budgets to fund the increased capital expenditure as follows;

Table 2: Revenue Highways investment included within Wiltshire Council Draft Business Plan 2013/17

Financial Year	2014/15	2015/16	2016/17	2017/18
In Year Investment (£ million)	2.100	2.000	1.400	0.900

The worst case scenario: Option 3 - £21.000 million investment with £12.262 million Maintenance Capital Block Funding would require the following investment:

Table 3: Worst case scenario funding requirement (Option 3 with £12.262 million Maintenance Capital Block Funding)

Financial Year	2014/15	2015/16	2016/17	2017/18
In Year Investment (£ million)	0.208	1.372	1.372	1.420

This highlights that the worst case scenario (subject to adjustment in 2017/18) would be less than that suggested under the proposed Highways investment within the current Financial Plan that supports the current Business Plan 2013/17.

87. The Highways revenue investment within the Wiltshire Council Business Plan 2013/17 and each financial year budget setting process would need to be adjusted to reflect the revenue investment implications in Table 1 of the chosen option, and re-profiled, but the level of investment assumed is consistent with Options 2 and 3.
88. The major risk associated with the Highways capital investment is the level of the Maintenance Capital Block Funding in future years. The announcement of future Maintenance Capital Block Funding is expected in the winter of 2013/2014 and at this point the financial implications of highway investment could be understood with greater certainty.
89. If the highway investment is made with an assumption of future Maintenance Capital Block Funding and the actual settlement is different, the financial implications of differing grant levels will need to be assessed and a judgement made as to whether the original investment plan is still to be followed.

90. The focus of Highways investment within this report is aimed at Capital works which will result in large scale Highway improvements to the road network. If the highway investment is approved, it is not anticipated that there will be significant savings in the ongoing revenue cost of maintaining the network, i.e. repairing potholes. The provision of the revenue element of highways works has been included within the recently awarded Highways and Amenities Contract. The contract has seen a system thinking approach adopted within highway maintenance works. The highway maintenance element of the Community Team work is less than 3% of the scheduled work. As large scale highway improvements are commenced, it is likely that highway maintenance workload will reduce; however, there are no significant anticipated savings.
91. It is possible that savings will be achieved in the materials used to complete the revenue highway maintenance works as described above. The current spend on highways materials is c. £0.200 million and therefore any revenue savings are going to be below this amount.

Legal Implications

92. The Council has a duty under the Highways Act to maintain the county's roads, and the Council's highway inspection procedures, policies and improvement plans ensure that this duty is fulfilled and enables the Council to defend any claims made in the courts. The increased investment and improved road conditions will help the Council to continue to meet its responsibilities with regard to road maintenance.
93. Increased investment in highways maintenance will enhance the Council's reputation, and the proposed involvement of the Area Boards in the project will build trust and confidence with the local communities.

Options Considered

94. Options for increasing investment in highways have been considered. An annual expenditure of £12.575 million, excluding inflation, would be required to maintain the highway network in its existing condition for the next 15 years. Spending less than this would result in road conditions deteriorating and public satisfaction reducing.
95. Increasing expenditure to £17.000 million for six years would enable approximately 185 kilometres of the roads in worst condition to be surfaced annually, and would improve 408 kilometres (9.2%) of the network by 2020. There would be an opportunity to involve the Area Boards, particularly in setting local priorities on the minor roads. This option would result in a moderate improvement to the condition of the roads.
96. Increasing expenditure to £21.021 million for six years would enable approximately 238 kilometres of network to be surfaced annually, and would improve 664 kilometres (15%) of the network by 2020. There would be the opportunity to involve the Area Boards in setting local priorities on the road network. This option would result in a significant improvement to the condition of the roads.

97. Treating all roads in poor or fair condition would improve road conditions, but would be enormously expensive, costing over £100 million annually for a number of years, and is not considered to be a realistic option.

Conclusions

98. The conditions of the road network are important to the public, and this is reflected through the People's Voice and NHT surveys. In order to improve carriageway conditions in Wiltshire, expenditure above anticipated LTP funding levels would be required for a number of years.
99. Funding of £17 million for six years would enable the safety of the network to be maintained, and enable a moderate improvement to be made in the condition of the unclassified roads, which have not had significant investment in recent years because of safety issues elsewhere on the classified roads.
100. Increasing the funding to £21 million for six years would provide a significant improvement to the condition of the network, including improving the condition of the unclassified roads, and improving safety on the classified roads by improving 664 kilometres of road. There would be the opportunity to involve the Area Boards to help identify local priorities for treatment.

Parvis Khansari
Service Director – Highways and Transport

Report Author:

Peter Binley

Head of Highways Asset Management and Commissioning

Peter.binley@wiltshire.gov.uk

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

None

Appendices

Appendix A – Carriageway Condition Surveys

Appendix B – Comparison of Options