

Economy, Communities and Corporate



Business Case

Investment in the Condition of the Strategic Network to Support the Local Economy, Secure Safety and Resilience

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Distribution List

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Table of Contents

PROJECT BUSINESS CASE.....	5
1. PURPOSE.....	5
2. REASONS	5
3. OPTIONS	7
4. BENEFITS EXPECTED	12
5. RISKS.....	13
6. TIMESCALE	14
7. EVALUATION	15

PROJECT BUSINESS CASE

1. Purpose

The aim of the business case is to drive the project. The business case should cover the totality of the business change proposed, not just one element of it. It should be reviewed by the Strategic Partnership Board for the Public Realm Services Contract at each key decision point, with all decisions taken in accord with the authority delegated in accord with the Council's constitution.

This Business Case has been produced as a result of the Council's Cabinet's consideration of options for investment in the highway asset to support safety, growth and efficiency. This at their away day on 27 April 2017. At that away day Cabinet asked that 3 business cases be worked up. The 3 Business Cases asked for were:

- Investment in the Condition of the Strategic Network to Support the Local Economy, Secure Safety and Resilience
- Further Investment in the Condition of Structures to Ensure Access for Communities
- Enhanced and Sustained Revenue Investment Drainage Clearance to Secure the return on the Investment made and alleviate flooding

This document is the detailed business case that supports this decision to invest in Condition of the Strategic Network to Support the Local Economy, Secure Safety and Resilience which will be delivered through the Forward Programme and Annual Plan in accord with the Public Realm Services Contract.

2. Reasons

The condition of roads is an important factor influencing overall satisfaction with council services, and surveys (National Highways & Transport Network (NHT) and State of Herefordshire Report) have consistently shown that the people of Herefordshire are both dissatisfied with road condition, and see it as a priority for improvement.

In addition roads in poor condition are more expensive to maintain than roads in good condition, as they require a higher volume of reactive repair to keep them safe, and when more substantial repair is delivered, the treatments required are more costly (reconstruction and deep resurfacing as opposed to surface treatments). The highway asset in Herefordshire is extensive, being over 2,000 miles in length and if it were being built today, it would cost in excess of £2.5bn to deliver. The depreciation in the carriageway asset is currently assessed at c£100m, this being the theoretical sum needed to return the condition of the asset to 'as new'.

It is widely recognised that it is best practice to manage the maintenance of large infrastructure assets through adopting a whole life approach to asset management. This with the objectives of:

- sustaining the asset in an optimal condition so that is fit for purpose throughout its life; and
- reducing its whole life cost.

It is a 'common sense' approach, with the right maintenance treatments, done at the right time, leading to the desired condition at the least overall cost. This approach can only be taken if the asset is in a reasonable overall condition, and the ongoing treatments required can be afforded.

The Local Transport Plan 2016 – 2031 sets out the council's Asset Management Policy and Strategy. In the LTP we set out the following in regard to the county's resilience network.

Policy LTP AM13 The Resilience Network as Part of a Strategic Network

The Council will prioritise maintenance towards a Strategic Network. The Strategic Network encompasses the Resilience Network plus additional highways based on the below criteria:

- Safety Critical Routes:** All A roads with the exceptions of A Roads that have low traffic volumes and B-roads with high traffic volumes;
- Economic:** Roads that are essential to business continuity in areas of principal economic activity in the county; and
- Safety:** Locations that have a history of high road traffic accident rates.

The underlying condition of the roads identified as Herefordshire's Strategic Network has fallen behind the national average. In Herefordshire 7% of the A road network (which forms the majority of the Council's Strategic Network) should be considered for maintenance, compared to 3% to 5% by region, nationally.

The condition of the county's A roads is also an important contributor to road safety, 76% of collisions are on A and B roads. Further, 42% collisions are caused by loss of control at bends and it is these collisions that may be reduced if the skid resistance of the road surface is good.

The overall decline in the condition of roads is a consequence of decades of under-investment and overall this situation is not unique to Herefordshire and is reflected across England. On the 25 July 2013 Cabinet gave their approval to additional investment in the highway network. That £20 Million was agreed by Council in February 2014 and on 5 June 2014 the business case for the additional capital investment to improve the overall condition of C class and Unclassified roads was confirmed. This work was delivered during the 2014/15 and 2015/16 financial years. The resulting works on the C and UC network has curtailed the decline in its overall condition, but the regular levels of investment that can be directed towards the Council's Strategic Network are insufficient to halt the decline in its overall condition. If we do not put the asset into a condition that can be sustained then it is inevitable that the demand for reactive repairs will increase whole life costs. This, against a backdrop of (at best) a managed decline in the condition of roads.

The council has been successful in its bid to the Department for Transport's (DfT) Local Highway Maintenance Challenge Fund – Tranche 2A. The bid will see £8m (£5m from DfT and £3m from the council's own capital programme) being invested in 2017/18 into three routes that are part of the Strategic Network, A4103 Hereford to Worcester, the A465 Hereford to Abergavenny, and the A438 Hereford to Brecon, in each case extending to the county border. The investment in these routes will support Herefordshire's economic growth by investing in transport routes leading to Herefordshire's Enterprise Zone. Further, these works will return those particular routes to a good condition throughout; bring them up to a condition that will reduce the whole life cost of their maintenance.

By taking action in accord with this business case the council will bring the overall condition of the County's Strategic Network up to an acceptable level and as reduce the whole life cost of maintaining the highway asset. This investment will support the local economy, help secure safety and resilience.

3. Options

Various investment options for developing recommendations have been considered. Our analysis of the highway asset taking account of:

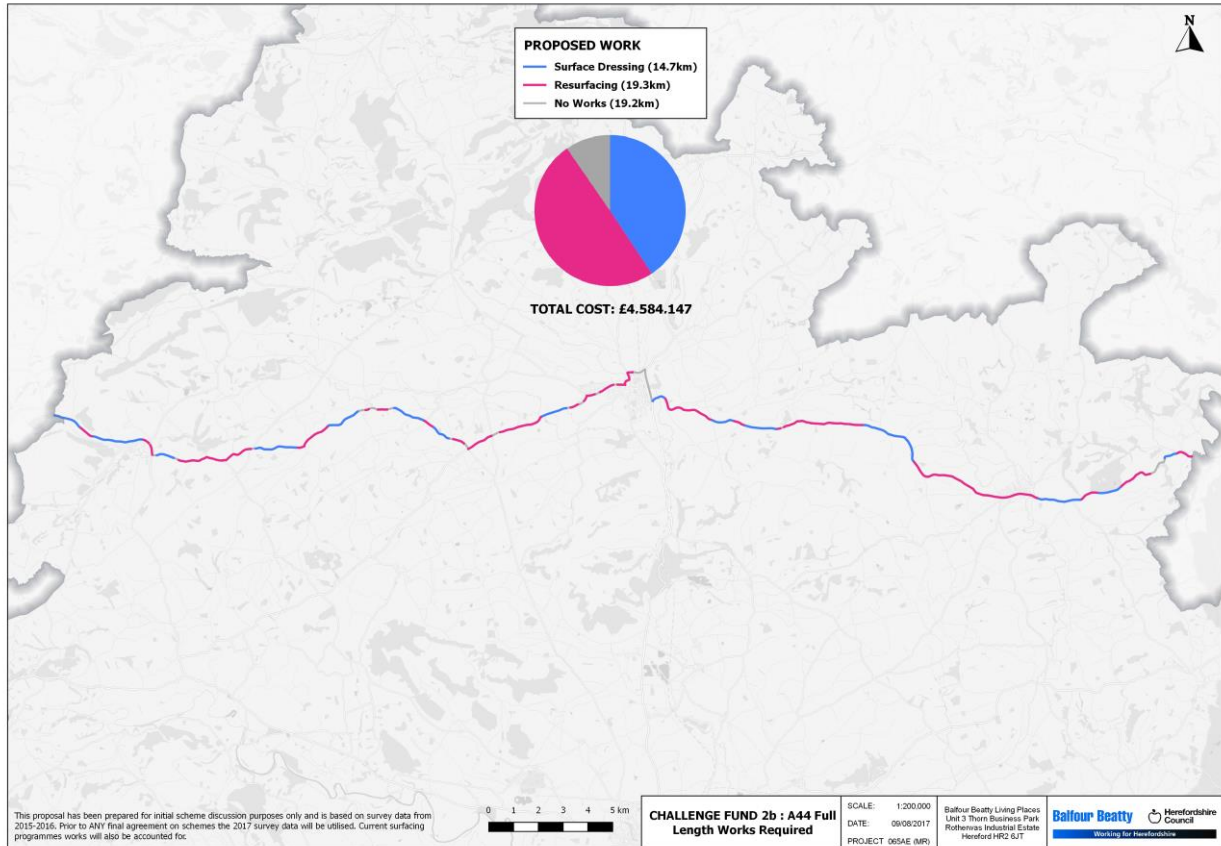
- its condition;
- the way that it deteriorates; and
- the impact of various treatments programmes.

Has identified that a capital investment of £12m will bring the condition of the Strategic Network up to an acceptable standard and with ongoing capital investment at normal levels this will reduce the whole life cost.

It is proposed that this sum is invested in further route treatments to the following:

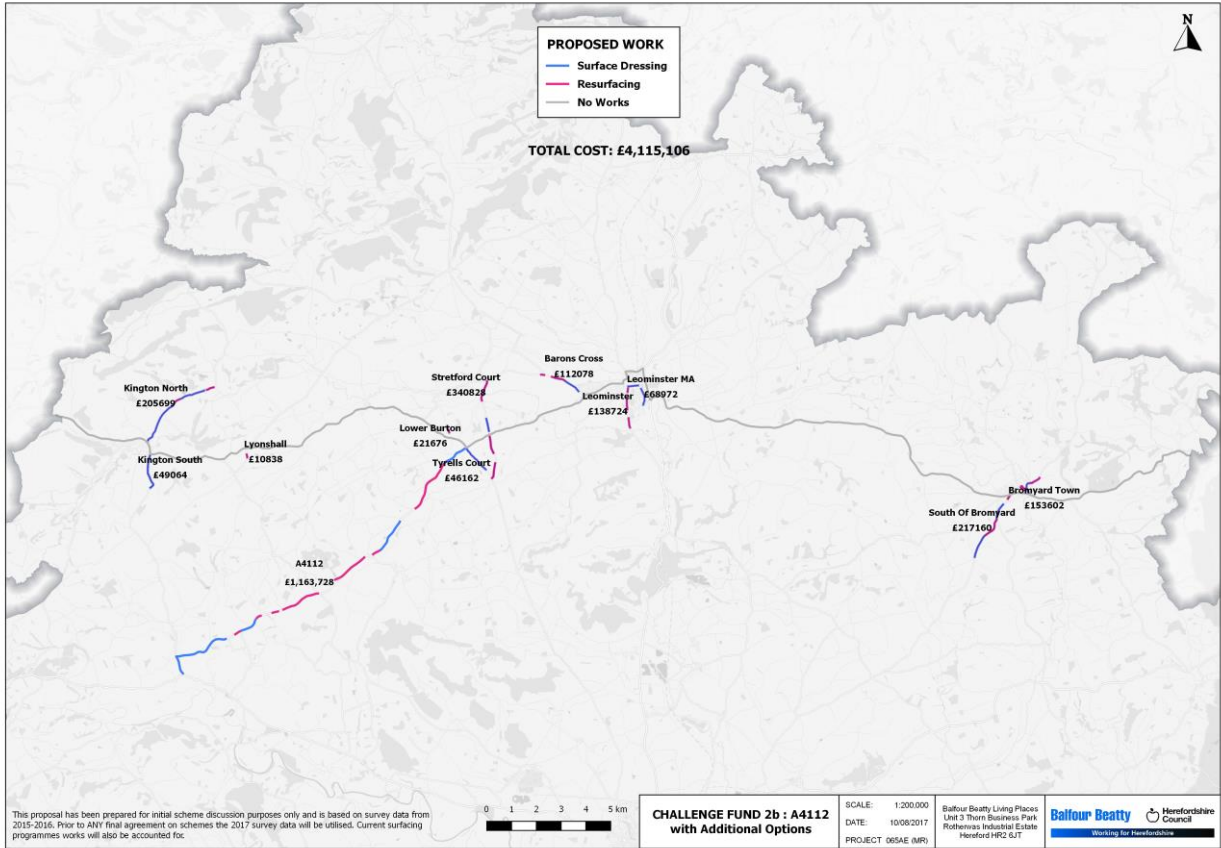
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- A44 from our border with Wales in the west across the County to our border with Worcestershire in the east £4.6m (including risk);

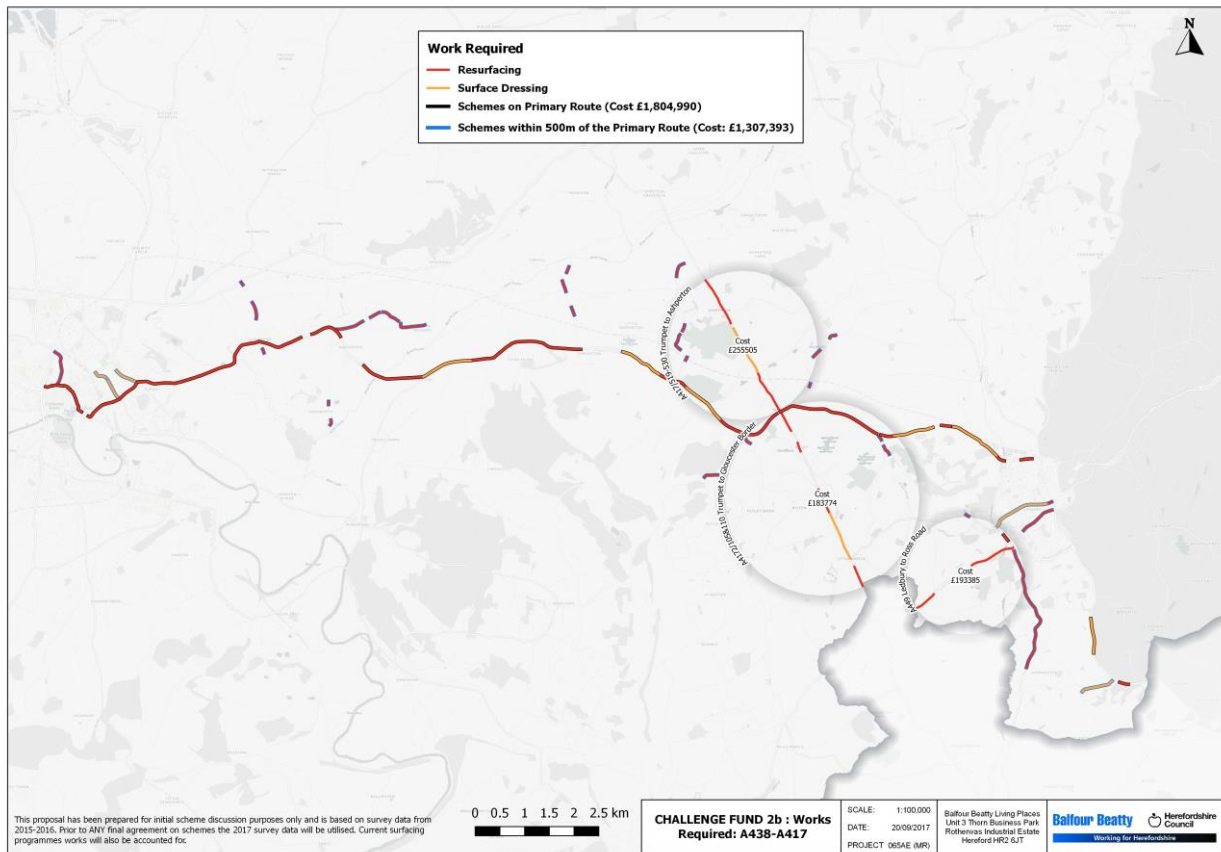


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- A4112 and various links to the A44 £4.2m (including for risk).



A438 Hereford to Ledbury and A417 Ledbury to the Border with Gloucestershire (M50 Junction 2) £3.2m.



A detailed programme of work will be developed to bring these roads up to a good condition throughout.

3.1 Affordability

The interest rates that are offered by all private sector investors will exceed that which is available to the council through the Public Works Loans Board (PWLB). The affordability of the PWLB option is further strengthened due to the loan finance becoming repayable over the whole life of the asset, which is 34 years for carriageways. As such this investment is sought through the council capital programme.

Clearly, the borrowing requirement will be reduced if alternative financing through capital grants, or other such sources, is secured. In this case, the opportunities to reduce the sums needed from the council’s capital programme are:

- Through further bids to the Local Highway Maintenance Challenge Fund (Tranche 2B or Tranche 3. The details for both are yet to be announced);
- The utilisation of sums made available to the highway service following the resolution of disputes with the Council’s former provider Amey;

- The utilisation of existing commitments made in the Council's Capital Programme.

The following table (Table 1) sets out the investment profile for this project.

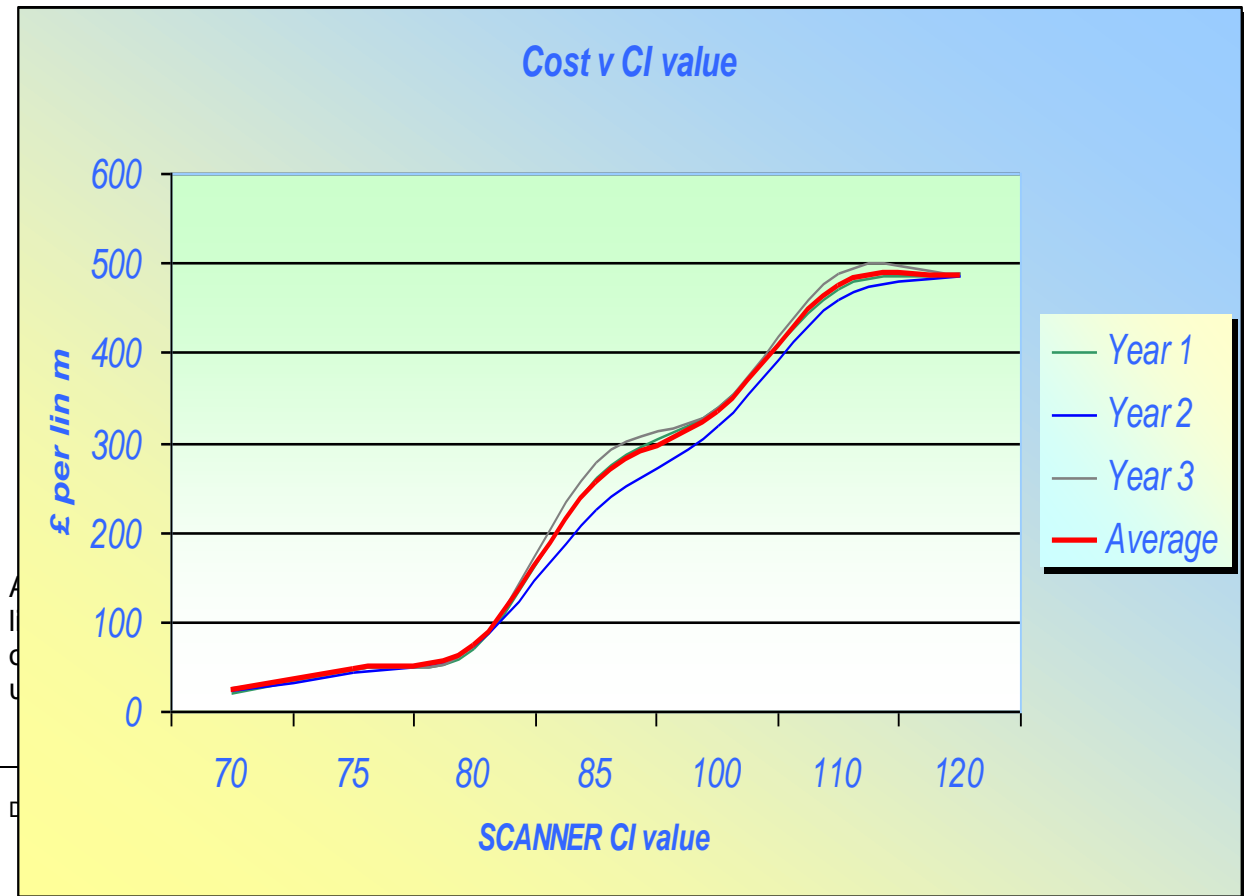
Table 1 – Indicative Investment Profile

	2018/19 £m	2019/20 £m	2020/21 £m	2021/22 £m
Capital investment	4.6	4.2	3.2	-

3.2 Value for Money

This capital investment will bring road condition up to a more acceptable standard and with ongoing capital investment at expected funding levels this will reduce the whole life asset cost. Reactive maintenance costs many more times the cost of preventative treatments therefore this investment is needed to get roads into a steady state that will enable planned preventative maintenance to sustain that condition as soon as possible. As illustrated in figure 1 below, by work that we have undertaken with the other members of the Midlands Service Improvement Group, the cost of work to address defectiveness at the 'red' end (to the right hand end of the graph) of the spectrum of condition is approximately 5 times that at the 'green' end of the spectrum (the left hand end of the graph).

Figure 1 – Cost of Treatment vs Road Condition Index



journey times and generating a high volume of complaints which can lead to additional financial compensation costs being incurred by the Council and the Community also.

The £12m investment will improve the overall condition of the County's Strategic Network.

It should be noted that this investment will not alleviate all road maintenance requirements but has been assessed as the optimum investment requirement to deliver a high benefit cost ratio. The £12m investment will offset depreciation and also result in an improvement in the value of the highway network.

The delivery of this investment is shown to be achievable and resources are available to carry out the programme of works. Investments of this nature have been evidenced to generate 5% in reoccurring savings on a whole life basis. The cost of repaying the investment equates to 5% of the expected budget allocation, this also demonstrates affordability and potential VfM.

Our work with the Transport Research Laboratory (TRL) using DfT's Highway maintenance Assessment Tool (HMAT) has concluded that for every £1 invested in the Local Road Network, the benefit to the economy is in excess of £8.

If other grant opportunities are presented securing then funding will be sought, however if such funding is not secured, investment using PWLB finance will reduce the whole life cost and result in an enhanced value and life of the network that is both affordable and offers VfM.

4. Benefits Expected

Clearly, we must generate a return that pays for the initial investment and realises the desired benefits to Herefordshire. That return will be in a reduced whole life cost which will offset pressures on the revenue budgets, which would if not addressed result in an escalation in:

- the demand for reactive maintenance (that must be met as a result of our duty to maintain under section 41 of the Highways Act 1980);
- claims against the highway authority for damage and injury; and
- an inability to sustain the level of capitalisation in highway maintenance (the proportion of the cost of delivery that can be met from capital budgets, is that which we can demonstrate is for works that enhance the value or life of the asset. Reactive works, that simply repairs the asset to a condition that is in line with its expected deterioration, cannot be met from capital budgets. As such, an increasing demand for reactive works, as a consequence of a declining overall road condition, will lead to an unavoidable reduction in the level of capitalisation.)

As a result of this investment we should also see:

- an increase in the level of customer satisfaction;
- lower costs to residents and businesses;
- fewer requests for service/complaint related to road condition;
- enhanced accessibility; and

- Herefordshire should become more attractive place to live and work.

Our modelling indicates that the benefit to the region's economy will exceed £96m.

5. Risks

The complete set of risks and issues are held in the project risk and issues log. The high severity risks are identified in table 2:

Table 2 - Risks

Risk	Mitigation
Underlying drainage issues, that have and will lead to accelerated deterioration in the highway asset, are not addressed through the investment period, leading to the benefits realised as a result of the investment not being sustained.	The levels of service established in the Forward Programme and Annual Plan for highway drainage clearance and repair, flood alleviation works need to be tested against the underlying need, and enhanced / maintained at the right levels. Community self help and effective lentsman activity needs to be developed through Locality Working to enhance levels of service and encourage others to address their own drainage obligations. Note: This is the subject of a separate business case.
Customers and Stakeholders expect this significant investment to address all highway defects throughout the county, which it will not. The risk is that expectations will be raised to unrealistic levels which will never be met, leading to a reduction in overall customer satisfaction with the condition of roads.	Address as a key message in the Communications Strategy.
The overall condition of the highway asset is not elevated to a level that enables a reduction in the need for the reactive response to highway defects. The risk is that this will lead to an increase in the proportion of reactive works and a consequential reduction in the level of highway works that can be capitalised and a pressure on revenue budgets.	Ensure an optimal approach to asset management is taken to maximise performance.
The overall condition of the highway asset is not elevated to a level that sees a reduction in the number of potholes that are of a size, or in a location, that cause damage or injury to highway users and their property. As a consequence, the scale of benefits anticipated to be realised by residents and businesses will not be realised resulting in sustained or increased cost to residents and businesses in Herefordshire. There would	Ensure an optimal approach to asset management is taken to maximise performance.

<p>also be consequential reduction in the overall satisfaction in the condition of roads.</p>	
<p>The impairment in the highway asset, as a consequence of the severe weather throughout the lifecycle of the asset and the resulting damage to the asset, is not fully addressed through damage repair works (as funded through Bellwin etc.). The risk is that the actual overall condition of the highway asset will be impaired and this will reduce the scale of the anticipated benefits.</p>	<p>Develop and refine 'bellwin' claim/delivery processes and record the best practice approach, so this approach can be 'rolled out' following severe weather in an efficient and effective way that maximises the amount of damage that is addressed following each severe weather event.</p>

Through the mitigation actions proposed, all of these risks can be reduced to more moderate levels.

6. Timescale

A detailed project delivery plan will be established. The implementation phase is planned to commence from April 2018, with the additional investment in the County's Strategic Network being delivered through the 2018/19, 2019/20 and 2020/21 financial years via the associated programme of works referred to above.

The project itself does not conclude in 2020/21 as the asset management strategy we are deploying here also relies upon an underlying and ongoing investment in the highway asset in order to realise the expected benefits over the lifecycle of the asset (which is 34 years). This asset management strategy is also fundamentally linked with the Public Realm Services Contract, which has an initial term of 10 years (from 1st September 2013). That term is extendable for up to a further 10 years and the award of extension is dependent on a set of strategic performance measures.

7. Evaluation

The anticipated value for money of this project has been evaluated in table 3. This methodology is adapted from that described in the Department for Transport's advice note 'Value for Money Assessment: Advice Note for Local Transport Decision Makers'

Table 3 - Value for Money Assessment

VFM Test	
Whole Life Cost	£12
Whole Life Benefit	£96
Benefit Cost Ratio (BCR)	8
VFM Threshold	<ul style="list-style-type: none"> • Poor VfM if BCR is below 1.0 • Low VfM if the BCR is between 1.0 and 1.5 • Medium VfM if the BCR is between 1.5 and 2.0 • High VfM if the BCR is between 2.0 and 4.0 • Very High VfM if the BCR is greater than 4.0
Qualitative Assessment	Large Beneficial
Key Risks, Sensitivities	See separate risk assessment
VFM Conclusion	Very High VFM