APPENDIX 3

Wiltshire Highways Asset Management Strategy

Draft – April 2015

Wiltshire Council
Where everybody matters

Wiltshire Highways Asset Management Strategy

Contents

1. Introduction

The Importance of Highway Infrastructure to Wiltshire

The local highway network is vital to providing connectivity for businesses and communities; effective maintenance to ensure its availability is essential to the economic development of an area. Wiltshire recognises the importance of maintaining and managing its highway network effectively. Doing so encourages economic development, ensures the public can safely use and enjoy the highway and contributes to the achievement of its corporate goals.

A well maintained highway network provides access for business and communities, as well as contributing to the area's local character. The importance of highway infrastructure cannot be understated. It is Wiltshire's most valuable asset, and its lack of availability causes considerable impact to communities, as evidenced by the disruption caused during the winter of 2013/14, when heavy rainfall and high groundwater caused some local roads in the county to be closed.

Wiltshire is committed to the good management of the highway asset, and has been working on implementing asset management principles for a number of years already. The recent severe weather experienced in Wiltshire has meant an increased focus on emergency repairs to guarantee the safety of road users. The effects of the severe weather are being addressed, and Wiltshire will continue to apply preventative asset management practices, leading to more effective management of the network.

Contribution of Highways to Economic Growth and Transport Objectives

Economic growth in the region will be driven by new employment opportunities and housing development, however without delivering improvements to infrastructure it will not be possible for Wiltshire to unlock this growth.

The Local Transport Plan and the Infrastructure Delivery Plan describe Wiltshire's key opportunities to support growth, and the transport challenges in the region. These will enable the following objectives of Wiltshire's Core Strategy:

- The creation of homes and jobs at the principal settlements
- Sustainable development and enhancing services and facilities at market towns
- Safeguarding the role of local service centres
- Improving employment opportunities, services and facilities at large and small villages

Prioritisation of critical and essential infrastructure projects will be undertaken by the Council and will be informed by the principles of the Core Strategy. Reduced funding

opportunities directly from central government will lead to those priorities also being rehearsed as part of Swindon and Wiltshire Local Enterprise Partnership's (SWLEP) Strategic Economic Plan (SEP) and Local Growth Fund (LGF) submissions and the Council's Community Infrastructure Levy receipts.

It is essential that new infrastructure that supports Wiltshire's ambitions can be maintained to the appropriate standard in the future and that existing highway infrastructure is maintained to similar standard.

A well maintained network that supports transport objectives

The SWLEP's SEP sets out its Vision, where by 2026, their ambition is that:

"Our transport network is a resilient, affordable, accessible and efficient system, and is a key enabler of economic growth."

It is a key driver supporting the SWLEP's aim to enable the delivery of: 40,600 jobs, 31,200 homes and 318ha of employment land. (estimating that the programme could add over £3 billion in GVA.

A reliable and effective highway network is clearly essential to bringing economic growth, which is supported by the local strategic transport objectives set out in Wiltshire's Local Transport Plan.

A well maintained network has a significant contribution towards meeting these objectives, which can be achieved through setting a series of asset management objectives. Asset management objectives are summarised in the table below, which shows how each contributes to one or more transport objectives.

Asset management objective		LTP3 Objective
To improve the condition and resilience of the highway network and minimise the risk of failure of parts of the network	SO1	To support and help improve the vitality, viability and resilience of Wiltshire's economy and market towns.
	SO6	To make the best use of the existing infrastructure through effective design, management and maintenance.
	SO16	To improve the resilience of the transport system to impacts such as adverse weather, climate change and peak oil.
	SO8	To improve safety for all road users and to reduce the number of casualties on Wiltshire's roads.
Minimise the impact of road works by ensuring works are planned and carried out at an optimal time.	SO4	To minimise traffic delays and disruption and improve journey time reliability on key routes.
	SO18	To enhance the journey experience of transport users.
To support public transport and sustainable transport alternatives by ensuring a well maintained and available network	SO2	To provide, support and/or promote a choice of sustainable transport alternatives including walking, cycling, buses and rail.
	SO5	To improve sustainable access to a full range of opportunities particularly for those people without access to a car.
	SO13	To reduce the need to travel, particularly by private car.
	SO14	To promote travel modes that are beneficial to health.
	SO15	To reduce barriers to transport and access for people with disabilities and mobility impairment.
	SO17	To improve sustainable access to Wiltshire's countryside and provide a more useable public rights of way network.
To effectively plan for the maintenance of new infrastructure required to support growth in a targeted manner	SO12	To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts.
	SO7	To enhance Wiltshire's public realm and streetscene.
To minimise the effects of noise and air pollution by effectively maintaining the highway network.	SO3	To reduce the impact of traffic on people's quality of life and Wiltshire's built and natural environment.
	SO10	To encourage the efficient and sustainable distribution of freight in Wiltshire.
	SO11	To reduce the level of air pollutant and climate change emissions from transport
	SO9	To reduce the impact of traffic speeds in towns and villages.

Importance of Investment

It is important that Wiltshire sets out a strategy to maintain its infrastructure in the future, to ensure it supports these transport objectives. Maintaining the network in a safe and serviceable condition is also key to support the growth ambition of Wiltshire and the needs of local residents and businesses.

Providing adequate funding to ensure a well maintained road network is a critical challenge not only for the Government but also for Wiltshire itself. There is a high public expectation that roads should be safe, reliable and comfortable to travel on. This expectation is set against a background of reducing public spending and aging infrastructure requiring more maintenance. At the same time, traffic on the road network has been increasing and there is an environment of severe and unpredictable weather that has potential to cause further damage to the road network.

Wiltshire is aware of the funding gap between the total cost of infrastructure to support growth and the amount of available funding, and has established that Community Infrastructure Levy (CIL) contributions can help meet the funding gap, but not completely bridge it. In addition to obtaining more funding, adopting an asset management approach is essential to maintain the network in a way that delivers maximum efficiency and value for money over the long term.

2. Asset Management Principles and Framework

Asset Management Policy

Wiltshire's Asset Management Policy is a high level document which establishes the Council's commitment to Infrastructure Asset Management and demonstrates how an Asset Management approach aligns with the authority's corporate vision and strategic objectives. The policy also summarises the principles adopted in applying asset management to achieve Wiltshire's strategic objectives.

The proposed 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.*

The Asset Management Strategy sets out how the Asset Management Policy will be delivered. This is informed by adoption of asset management principles, understanding asset management as part of a framework with local and national influences, and establishing specific performance standards which align to the strategic LTP objectives.

Highways Asset Management Framework

The Highway Infrastructure Asset Management Guidance published by UKRLG sets out a framework which describes all asset management activities and processes that are necessary to develop, document, implement and continually improve asset management practices. These activities and the approach to their delivery should be clearly documented and accessible to relevant stakeholders, but the guidance recognises that individual authorities will need to be flexible in the application of the framework to accommodate their own requirements.

The Highway Infrastructure Asset Management Guidance recommends that the framework is developed by individual highway authorities to meet their needs, aspirations and their starting point on the asset management journey.

The Asset Management Framework illustrated below can be used to understand the context of asset management practices in Wiltshire.

CONTEXT		
Corporate Vision: *Wiltshire Core Strategy*	Local Transport Policy: *Local Transport Plan 2011 - 2016*	Stakeholder Expectations: *NHT customer surveys and People's Voice (amongst others)*
Network Resilience *Wiltshire is flooding prone – challenge to achieving a resilient network*	Political Commitment *Wiltshire has the political support to engage in efficient asset management*	Financial *Additional funding of £6m/yr for Lifecycle Planning schemes*

PLANNING
Asset Management Policy: Incorporating principles and vision
Asset Management Strategy: Long-term approach, objectives, outcomes
Hierarchy: a road hierarchy specific to Wiltshire's needs is currently in use, but may need to be amended to better reflect Wiltshire's current requirements.
Data: routine data collection for all assets, including a rolling programme of carriageway, drainage, footways and visual inspections of street lighting
Lifecycle Planning: carried out analysis and secured additional funding for pavements
Levels of service: setting performance standards will be a priority for Wiltshire

ENABLERS
Leadership & Organisation: political commitment, delivery contract with Balfour Beatty
Asset Management Systems: use of WDM asset management system
Innovation: new materials and technology in pavement maintenance

DELIVERY
Transport Asset Management Plan 2011
Infrastructure Delivery Plan 2011 – 2016
Delivery of Projects
Delivery of Routine Maintenance Activities
Improvement plans for asset management delivery
Communication Strategy

Performance Standards

Performance standards should be set out as part of the asset management strategy, as a means of understanding whether the asset management objectives are being met. Stating performance standards improves clarity for stakeholders and establishes a link between the strategic objectives and the desired outcomes of the asset management strategy.

Setting the right performance standards is always a balance of often conflicting issues. At one level, the optimum target might be described as the one that requires the least cost to maintain in terms of performance over a period of time. Where the optimum target is not met, the incidence of unplanned and reactive maintenance increases which is ultimately more costly as well as more disruptive to road users. However, setting optimum performance targets should be balanced against the reality of funding pressures and user expectations. In this context it is important to understand which performance targets are affordable and would be required to ensure that the road network serves its core function of enabling economic growth.

User preferences should also be taken into account when developing performance standards. In Wiltshire, recent results from the National Highways and Transportation (NHT) customer survey show that the condition of roads is both the item that is “most important to users” and the aspect “in most need of improvement”. The data indicates a strong preference for improvement in carriageway (road) condition. This is consistent with the results of the Council’s most recent “What matters to you” survey (May 2014), which highlighted road and pavement repairs as the issue most in need of improvement according to respondents.

Setting performance standards for asset management in Wiltshire is considered a priority. These will be established by taking into consideration the current condition of the network, available funding and user preferences.

3. Strategy for Main Asset Groups

The Existing Highway Asset and Asset Hierarchy

The highway asset is made up of the following assets:

- Carriageways (roads)
- Footways and Cycleways
- Structures
- Drainage
- Lighting
- Signs and Street Furniture
- Traffic Control and Information Systems

Customer satisfaction scores with regards to highway maintenance and carriageway condition are below average in comparison to scores from other county councils. Customer preferences indicate that managing the condition of the carriageway assets is a priority, as it is perceived as being the asset with most need for improvement and in more need of attention. This has been acknowledged in creating this Strategy for each asset as outlined below.

For each asset, a brief description of the condition of the asset is provided, followed a statement of the desired outcome this strategy seeks to achieve (which is aligned to the overall objectives). The maintenance approach required to deliver each outcome is then described.

The key current condition of the network is summarised in the table below:

Asset Group	Condition
Carriageways	The vast majority of carriageways are considered to be in good condition. Approximately 2% of the network is considered to be in poor condition, i.e. in need of intervention.
Footways and Cycleways	Awaiting completion of condition survey in 2016.
Structures	213 structures (mostly on A and B roads) have been brought up to an appropriate standard since 2000. 54 structures (on C roads and unclassified roads) are still sub-standard and will be treated in future.
Drainage	Collecting data on drainage assets is ongoing.
Street Lighting	Approximately 6,500 concrete columns in Wiltshire are at the end of their design life.
Traffic signals and information systems	Approximately 180 sites. 25% are older than 20 years, and 50% are older than 15 years, with many features obsolete. Prioritisation programme being developed. Urban Traffic Control System in Salisbury must be replaced by 2018.

In the application of the strategy it is important to recognise that the failure of certain routes and infrastructure would have a greater impact on Wiltshire's economy and communities than the failure of others. Developing an asset hierarchy will help identify critical highway infrastructure which forms a crucial part of the highway network, and whose management may need to be prioritised over that of other routes where the impact of non-availability is significantly lower. Developing and applying an asset hierarchy can help address this issue, and ensure the needs, priorities and actual use of each road in the network is considered when developing a maintenance strategy.

Currently Wiltshire manages the carriageways asset according to a hierarchy broadly based on road classification, and further divided by urban/rural road type as outlined in the table below:

Hierarchy Group & Name		Description
AR	Rural A-roads	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.
AU	Urban A-roads	Routes for fast moving long distance traffic in urban areas. Speed limits are usually in excess of 40 mph. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.
BR	Rural B-roads	These roads link the larger villages and HGV generators to the Strategic and Main Distributor Network.
BU	Urban B-roads	These roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built up areas these roads have 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons
CR	Rural C-roads	These roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two way traffic.
CU	Urban C-roads	These roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two way traffic. In urban areas they are residential or industrial interconnecting roads with 30 mph speed limits random pedestrian movements and uncontrolled parking
UR	Unclassified rural roads	These roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs.
UU	Unclassified urban roads	These roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-de-sacs.

While this hierarchy is a useful starting point, it is worth noting road classification should not be used as the sole basis for developing a hierarchy, as there may be differences between the classification of the road and its function or its criticality. A more granular hierarchy based on road use would enable asset managers to make better decisions regarding the asset.

Carriageways


Carriageways (roads) are the asset group in greatest need of attention and the desired outcome of this strategy is to improve their overall condition. The strategy targets increased investment in order to arrest the progressive deterioration, and improve carriageway conditions.

Work has been undertaken using the HMEP carriageway lifecycle planning toolkit to model the condition of the carriageway asset under different funding scenarios and maintenance strategies. The analysis investigated possible means to improve the overall condition of the carriageway, particularly focusing on improving those carriageway sections in “poor” or “very poor” condition.

Currently local access roads and urban link roads have the greatest percentage of sections in worse than “poor” condition, but the analysis showed application of moderate or thick overlays/inlays would significantly improve the condition of carriageways in these groups. While these groups showed the most improvement, it is worth noting that the analysis did not exclusively focus on treating those sections in poor or very poor condition, but also considered how preventative treatments could be used to preserve those sections of the network already in a good condition.

Maintaining carriageways in a safe condition is one of Wiltshire’s strategic objectives. Wiltshire Council has a detailed SCRIM Policy and maintenance programme, which targets those sites in the county with poor skid resistance. Survey results are used to produce a prioritised programme which takes into account the number of accidents, skid deficiency, speed environment, investigatory level and road hierarchy.

Due to the current state of the network, a two phase strategy is required to meet the asset management objectives set out above. In the short term (2015/16), the strategy will be to ensure the network is maintained in a safe condition. The focus will be on repairing the damage caused by the severe weather during the winter of 2013/14. While significant work has already been undertaken to address this damage, some routes still require repairs. In the short term Wiltshire will therefore respond to customer needs by adopting a worst first approach.

In the medium term (2016 and beyond) Wiltshire will establish an approach to improve long term performance, adopting preventative maintenance treatments, which when applied at the optimum time can provide significantly better value than reconstruction.

The investment in highway maintenance through the Council's Local Highways Investment Fund 2014 – 2020 is helping improve the resilience of the network to the effects of climate change as a result of increased incidents of flooding and extreme weather. It should reduce the damage from flooding and make it possible to effect repairs quickly if the extreme weather lasts for extended periods.

By adopting this approach Wiltshire Council's understanding of long term performance of the network will improve, which in the longer term will provide greater investment certainty, and ensure greater value for money and efficiency in investment decisions.

Desired Outcome: to deliver a sustainable improvement in overall condition.

- £21m funding annually has been approved to support investment in carriageway maintenance
- Maintenance strategies such as moderate or thick overlay will be used to improve the condition of sections of the network which are currently in worse than "poor" condition. These treatments will be carried out on all road types, but the greatest improvements are expected to occur on local access roads and urban link roads
- Preventative maintenance treatments will be applied in other locations to inhibit the deterioration of sections which are currently in a better condition.

Approach - In the short term (2015/16) repairs will be carried out to ensure the network is maintained in a safe condition. In the longer term, a preventative approach will be adopted. This means investing a greater proportion of the available budget to treat roads in the early stages of deterioration. A preventative approach targets assets that are not currently in need of full structural renewal and proposes to extend the assets whole life by arresting/delaying deterioration.

Footways and Cycleways

Condition surveys of the council's footways and cycleways are underway and the entire asset will have been surveyed by 2016. Footways and cycleways are vital to supporting sustainable travel alternatives, and hence the strategy will involve prioritising those footways and cycleways which are in poor condition but have high levels of use.

In the absence of full survey coverage current practice is to carry preventative maintenance on those footways and cycleways which are adjacent to main carriageway works. A visual inspection and a qualitative assessment of usage is carried out to inform this decision. While not optimal, in the absence of data this approach minimises the impact of road closures on the public and can lead to cost efficiencies.

Once footway and cycleway surveys are complete, Wiltshire will develop a process to make best use of this data and sustainably improve the condition of high use footways and cycleways by developing a yearly planned maintenance programme.

Desired outcome: to make best use of the footway survey data and improve condition of high use footways and cycleways.

Approach – The current approach based on visual inspection and assessment of maintenance need is to be retained until the data from the condition surveys becomes available. Once survey coverage is complete a yearly maintenance programme will be established to improve the condition of higher use footways and cycleways. For those footways of lower use, a regime of routine maintenance to address localised defect repair will be adopted.

Structures

Bridges and other highway structures constitute a vital part of Wiltshire's infrastructure, providing essential links in the network. Their maintenance and upkeep is of importance as very often highway structures represent a single point of failure, i.e. failure of one of these structures may cause a whole route to be closed and diverted. Maintenance can involve repairing damage to the structure, preventative work to slow down deterioration (such as painting), or improving the structure to meet current traffic demands (for example strengthening structures so they can safely carry higher vehicle loads). Regular inspections are essential to detect damage and deterioration and ensure the best maintenance treatments are selected.

In Wiltshire during standard structural inspections all structural elements are examined and their condition is assessed, providing a condition score. The score for all elements is then used to calculate the overall Bridge Condition Index (BCI). The information contained in structural inspection reports is examined by the Principal Engineer to determine the programme of maintenance to be followed. The reports are stored in the council's structures database (Exor), which allows inspection information to be queried easily.

In addition to the routine maintenance described above, a programme of strengthening and major maintenance is also underway. The purpose of this programme is to ensure all bridges in Wiltshire can safely carry current vehicle loads. At the beginning of the programme all structures in need of major maintenance were prioritised according to road type, establishing a hierarchy for intervention. Since 2000 a total of 213 structures (mostly on A and B roads) have undergone reconstruction, strengthening, monitoring, or alternatively have been demolished, protected, or a weight limit has been placed on them. A total of 54 structures (on C roads and unclassified roads) are still sub-standard and will be treated in future.

Desired outcome: to meet statutory duties and maintain safe structures by undertaking routine maintenance and continuing with the present strengthening programme.

Approach – Inspection of structures will be the basis for understanding the maintenance needs of Wiltshire's structures. Data from inspections currently informs the repairs necessary to particular structures, and their priority for inclusion in the maintenance programme. The current bridge strengthening programme will also be retained, with bridges on heavily used routes being prioritised over others.

Drainage

The main function of the drainage asset is to allow water to be removed from the carriageway to outfalls or watercourses, thereby removing standing water from the carriageway and allowing vehicles use it safely. Wiltshire Council is currently carrying out an extensive survey of the drainage asset by means of CCTV inspections. While no specific programme of drainage improvements exists, Wiltshire Council ensures that when carrying out works on highway assets, the condition of drainage in the area is evaluated and improved where appropriate.

Desired outcome: keep the asset in a serviceable condition by undertaking routine maintenance, and complete the drainage surveys.

Approach – Wiltshire will continue to undertake routine maintenance of the drainage asset (such as cleaning gullies) to comply with statutory obligations, and will improve drainage in locations where improvements would improve safety or significantly reduce flood risk.

Street Lighting

Street lighting is an important highway asset, contributing to public amenity and safety. Its efficient operation and maintenance will allow Wiltshire to provide adequate lighting for roads and footpaths and ensure lighting columns are maintained in a safe condition.

Currently Wiltshire Council operates a three year routine maintenance cycle, with all columns in the County being inspected and the lamps changed and cleaned at least once every three years. In addition, every six years (i.e. one out of every two cycles) an electrical test is undertaken. This maintenance cycle aims to minimise non-routine visits and improve the efficient operation of the asset by replacing old lamps with models which are more energy efficient.

Since Wiltshire is a rural county it is not feasible to implement a routine inspection regime for street lighting over and above the routine maintenance cycle described above. However, night scout patrols are currently in operation, allowing faults to be identified and logged into the lighting management system. Non-routine maintenance

is carried out to correct these faults and others which are noted during routine maintenance.

In addition to these maintenance activities, discrete projects to replace old lighting columns are also undertaken. These projects are carried out at specific locations where columns may be at the end of their life or where access for maintenance may be problematic. Replacing the columns at these locations with newer equipment minimises the risk of failure and the occurrence of non-routine faults.

Wiltshire Council is introducing a programme of measures to reduce energy consumption and the Council's carbon footprint by the introduction of part night lighting where appropriate and more efficient equipment as opportunities arise.

The challenge for Wiltshire Council, as for many Local Authorities, is to manage the lighting asset as a large proportion of it comes to the end of its life. Approximately 6,500 concrete columns in Wiltshire are at the end of their design life and will be in need of replacement in coming years. Wiltshire will use non-destructive testing for steel lighting columns which are at the end of their design life. This testing will help determine whether columns need to be replaced before they reach failure, and hence will minimise risk to the public and contribute to effective management of the asset.

Desired outcome: to ensure the safety of the public, reduce energy consumption, and improve the ease of routine maintenance for the existing asset.

Approach – Routine inspection, testing and maintenance is vital to the safe operation of the asset and will continue to be undertaken. To improve efficiency Wiltshire will explore methods to reduce energy consumption and the use of lamps which can sustain longer periods between inspections, adapting the inspection frequency accordingly and therefore minimising routine maintenance costs.

Traffic Signals

Traffic signals are an important asset on the highway network, and their correct operation is essential to regulate traffic flows and ensure the safety of drivers and pedestrians. As with street lighting, managing the maintenance and renewals of the traffic signal stock in Wiltshire is challenging due to budget constraints and the age of the asset.

A maintenance contract is currently in place for traffic signals and vehicle-activated signs, which includes an annual inspection and lamp change with some electrical testing.

In addition to these maintenance activities, a yearly refurbishment programme is also produced. This programme aims to replace signals at specific locations (mostly pedestrian crossings due to budget constraints). The sites are selected based on age and local knowledge.

Given the challenges of effectively managing an ever-growing and aging stock with limited budget, Wiltshire Council has recognised the need for a step change in the

management of traffic signals. The intention is to move towards an asset management approach, where priorities for investment are established based on age, asset hierarchy and technology obsolescence/reliability. This approach aims to manage risk effectively while still recognising budget pressures. Following this process will allow funding applications for specific sites to be well evidenced, and ensure that the sites in most need of refurbishment are prioritised.

An additional challenge for Wiltshire Council is that BT is planning to withdraw analogue private circuits by 2018, meaning the current Salisbury UTC/SCOOT system will stop operating. Upgrading this system will therefore become critical, and several options are currently being considered, including connectivity using modern technologies such as wireless or cloud based systems.

Desired outcome: to maintain the traffic signal stock using an asset management approach with clear priorities, moving from reactive to preventative maintenance. In the medium term, improve the reliability and communication links with the signal stock through the use of targeted investment.

Approach – The current maintenance regime will continue to operate for routine activities, but an asset management approach will be used to establish a refurbishment programme, with the intention of increasing the proportion of preventative maintenance. Better use of inspection data will be made to select and prioritise refurbishment sites based on documented criteria such as age, asset hierarchy, technology obsolescence and reliability.

Capital Improvement and Road Safety Schemes

The Strategy supports the need to focus on improving road safety and encouraging growth through delivering appropriate improvement schemes. Whilst the Strategy does not directly cover these activities, it is intended to facilitate a joined up approach to the delivery of improvement and maintenance schemes. There is also an on-going requirement to understand the future maintenance implications of new capital schemes. Further efficiencies may be gained by adopting effective asset management to incorporate additional works to minimise whole life costs and future traffic disruption.

The Asset Management Strategy and associated long term delivery plans, will allow a more coordinated approach to the provision of Capital Improvement and highway maintenance schemes. This will ensure that maximum value is achieved from the various capital and revenue investments through the lifecycle of new and existing assets.

Sudden Asset Failures

Whilst the Strategy advocates a planned and risk based approach to Asset Management, there may be exceptional circumstances in which a particular asset fails rapidly - beyond prediction. In this event, planned activities will be reprioritised (using the principles contained within this Strategy) across all asset groups in order to facilitate the inclusion of additional schemes within the programme.

Planning Considerations

The Council understand the importance that growth and re-development has for the future of the local area and economy. However, there is a need to ensure that any new development or change of use promoted through the planning process fully consider the impact on the existing highway network and its future maintenance.

4. Knowledge and Information Management

Knowledge of the asset is used to describe the asset and its performance, and is essential to providing informed decision making and delivering an asset management approach. Data enables asset managers to understand the asset and drive continuous improvement.

Wiltshire Council carries out routine collection of data to understand the condition of the network and support the development of maintenance programmes. A quarter of the road network is surveyed every year using SCANNER, achieving complete network coverage every four years. In addition, county-wide footway and drainage condition surveys are undertaken, with footway data collection due for completion in 2016.

It is intended that the collection and updating of this data will continue, as it will support the asset management objectives of Wiltshire Council and will ensure that the outcomes for the individual asset strategies can be met.

The data gathered in these surveys, including details on inventory, asset location and performance, is recorded and stored in asset information databases. These provide a central repository for asset information which can be easily interrogated to obtain information necessary for the day to day management of the asset and to inform short and long term maintenance needs.

As part of the implementation of asset management, Wiltshire Council will consider the need to review current data collection techniques as well as the need for the development of an asset information strategy.

5. Best Practice

Wiltshire Council is committed to the development of good practice and benefits from lessons learnt at National, Regional and Local levels. Furthermore, Wiltshire Council is committed to the sharing of knowledge and experiences in implementing asset management with other Highway Authorities across the Country. To this end, officers from Wiltshire Council regularly present examples of good practice at national conferences and are members of several professional groups. Best practice examples include:

- Attendance at national and regional conferences;
- Membership of the CIPFA Highways Asset Management Planning Network;
- Taking part in webinars for local and national dissemination of knowledge;
- Chairing the ADEPT group Engineering Committee

In addition to the above, Wiltshire Council is committed to the long-term professional development of its officers, and to encouraging young people into engineering and asset management. Wiltshire Council ensures that its term maintenance consultants and contractors have appropriate staff training and development schemes.

6. Performance Monitoring

Performance monitoring will involve regular examination of whether the implementation of asset management practices in Wiltshire Council is contributing to the fulfilment of the asset management objectives and to the successful management of the asset. Monitoring performance against these asset management objectives will allow Wiltshire Council to better understand progress already made towards managing the asset more efficiently, and where continuous improvement, or changes to current practice, may be required to do so more efficiently.

Performance management is usually carried out by selecting a number of measures which support the asset management objectives and performance standards of the asset management strategy, and measuring progress against each measure. Monitoring performance will only be effective if the appropriate measures are selected, and if the associated performance targets can be realistically achieved by implementing asset management best practice.

It is intended that performance standards should be developed and appropriate performance monitoring measures are selected to reflect these standards. Consideration will also be given to how the performance measures contribute to the overall asset management objectives.

7. Strategy Review

This strategy will be reviewed and updated annually, with reviews to align with the new Infrastructure Delivery Plan and Local Transport Plan development. This process will be managed and implemented by Wiltshire Council officers.