# Highways Asset Management Strategy: 2019 – 2028.

# Blackburn with Darwen Borough Council

# CONTENTS

## Foreword

**By Cllr Phil Riley, Executive Member Regeneration.**

The highway network is amongst the largest and most visible of our community assets. The Council maintains more than 500km of roads, 1.7M sqm. of footways, 249 highway structures and 17,500 lighting columns. The highway network is used daily by residents, businesses and visitors and is fundamental to the economic, social and environmental wellbeing of the borough. It helps shape the character and quality of the local area, and makes an important contribution to wider Council priorities including supporting businesses, improving housing, health and well-being, safeguarding vulnerable people and making the most efficient use of available budgets.

The Council recognises that it is crucial that the local highway network is managed in the most effective way, a view shared by residents and highway users who see this as a high priority area of work. This Highway Asset Management Strategy defines the approach to maintaining assets in order to provide the best possible service to all highway users. At the heart of the strategy there are two fundamental objectives. The first is the application of good asset management principles to maintain the network in the most efficient and cost effective way. The second is a commitment to engage with all highway users to achieve a level of service that meets all reasonable expectations. During the current challenging economic climate it is more important than ever to maintain our roads and other highway assets in the most efficient way and I believe this Highway Asset Management Strategy will help to achieve that aim.

The Council is committed to making the borough a great place to live, work and visit. I look forward to working with highway teams, residents and all other stakeholders to achieve the aims of managing and improving our highway infrastructure for the benefit of all highway users.

***[Signature] ……..***

## Glossary of Terms and Abbreviations

| | |
|---|---|
| Adopted Highway | Public roads and footways maintained by the Council (the Highway Authority) in accordance with the Highways Act 1980. |
| Data Owner | Highway Asset Manager. |
| Forward Work Programme | List of approved schemes for the current and forthcoming year and an indicative list for a further three years. |
| Highway Network | Collective term for adopted public roads, footpaths and their associated assets. |
| Inventory | Information that is gathered and used to quantify and describe each of the major asset types. |
| Levels of Service | The standard applied to the maintenance of highway assets. |
| Life Cycle Plan | Strategy for maintaining an asset from its initial construction through to its disposal. |
| Preventative Maintenance | Application of relatively inexpensive maintenance treatments at the most appropriate time to protect and extend the life of assets. |
| Treatment Option | A possible treatment type that can be used for the maintenance of an asset. |
| CVI | Coarse visual inspection. Survey used to assess carriageway condition based on a nationally standardised methodology. |
| DRC | Depreciated replacement cost. The value of the highway network taking into account depreciation. |
| FNS | Footpath Network Survey. |
| GRC | Gross replacement cost. The value of the highway network based on the cost of rebuilding it from new. |
| HAMP | Highway Asset Management Plan. The subject of this strategy. |
| LTP | Local Transport Plan. Government capital funding for highway and infrastructure maintenance. |
| SCANNER | Surface Condition Assessment for the National Network of Roads. A high-speed surface condition survey undertaken from a van, normally on the classified road network. |
| SCRIM | Sideway Force Coefficient Routine Investigation Machine. Used to determine the skidding properties of roads. |
| WGA | Whole of Government Accounts. HM Treasury scheme to create a national single set of public accounting protocols. |

## Document Information

| | |
|---|---|
| **Title** | Highway Asset Management Strategy: 2019 – 2028 |
| **Author** | Matthew Joyce |
| **Description** | The production of a Highway Asset Management Strategy is considered best practice and is aimed at encouraging local authorities to adopt good asset management practices. This strategy identifies the key, strategic priorities of Blackburn with Darwen Borough Council, as the local highway authority, during the period 2019 to 2028. This strategy seeks to holistically manage all highways assets with available resource. |

## Document History

| | | | |
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Comments and Feedback

Blackburn and Darwen Borough Council welcome constructive comments and feedback on the content of this strategy, which will enable us to revise the content improve and tailor our service to our customer's needs.

Comments can be emailed to highways@blackburn.gov.uk, please enter Comments on Asset Management Strategy as your subject.

## Executive Summary

Since the introduction of the first HAMP, the Department for Transport (DfT) has introduced changes to the national highway maintenance formula funding mechanism by introducing the Incentive Fund. As a consequence each highway authority will no longer be allocated full funding on a needs basis and will be required to complete a self-assessment questionnaire against a set of criteria aimed at assessing performance and to provide evidence of implementing effective highway asset management.

The strategy is based on managing our assets on a holistic basis. It will be necessary to prioritise between our assets based on the relative importance that each asset group contributes towards our goal of delivering an effective highway network. This is crucial to the provision of a well-managed highway network for residents and businesses of the Borough.

The strategy will follow this format:

| | |
|---|---|
| Part 1 | The overall strategy behind the Council's approach to the management of the highway asset. |
| Part 2 | The investment and delivery strategy of the Council's infrastructure assets and details how the long term objectives will be achieved. |
| Part 3 | Communications. |
| Part 4 | Asset Management Framework will set out a framework for managing highway infrastructure assets. |
| Part 5 | Data Management describes what data is held and how often it is updated. |
| Part 6 | Performance Management. |
| Part 7 | Risk Management. |
| Part 8 | Benchmarking. |
| Part 9 | Annual report describes the structure of the annual report. |

The effects of severe weather on this strategy are mitigated by the Council's Resilience strategy. Irrespective of such events this plan will maximise the effects of the available investments over the life of this strategy. Throughout its lifetime, the plan will be subject to regular performance management and scrutiny by elected members and senior management and Audit. The strategy supports and compliments the Council's transport policies, strategies and plans.

# Part 1 – Overall Strategy

## Introduction

In recent years the investment in highway infrastructure and its performance has been increasingly under the spotlight. The current financial challenges and high public expectations mean that local highway authorities are expected to manage their highway infrastructure in the most efficient way.

Asset management has been widely accepted by both central and local government as the best approach to the management of highway infrastructure assets through long term planning. This approach enables more efficient and effective use of resources, while fulfilling legal obligations, delivering stakeholder needs and safeguarding the engineering integrity of the network.

Policies, investment and delivery strategies have been endorsed by elected members and benefit from information gained from resident surveys, communications via our website and other users of the highway.

Blackburn with Darwen Council understands that the highway infrastructure forms the backbone of the local economy and is a major determinant of growth and productivity. The Council understands that an effectively maintained and managed network contributes to the achievement of its corporate goals. Asset management supports decisions and provides long term financial benefits; it assists in understanding the structure and character of the highway network and describes how it performs as well as assisting in determining the funding needed to meet the requirements placed upon it.

The Highway Asset Management Strategy defines how the Council will establish long term objectives for the highway network incorporating statutory obligations, stakeholder needs, local priorities, structural condition, funding and resources.

This strategy document describes the management of the Council's highway assets, allows planning for the longer term and will allow for future changes in funding policy. The strategy considers long term needs and whole life costs alongside the short term position to address a maintenance backlog arising from nationwide under-investment.

This strategy incorporates all funding provided for highway maintenance from any source. It embraces all major asset groups including:

- Carriageways
- Bridges and Similar Structures
- Footways
- Street Lighting
- Traffic Signals
- Drainage
- Aids to Movement

Whilst the general principle of the strategy covers the Public Rights of Way Network, it should be seen as supporting rather than replacing the Public Rights of Way Improvement Plan.

This strategy and associated documents are available to all highways staff and the general public. Executive members, Chief Officers and senior managers have been briefed on the purpose and content of this strategy.

This review of the strategy considers and incorporates the recommendations of the UKRLG Code of Practice "Well Managed Highway Infrastructure".

An efficient and effective transport network lies at the heart of a booming economy. A good transport network provides roads that are substantially free of defects and allows travel without undue queuing or delays.

Exceptionally severe weather during the winters of 2008/09, 2009/10 and 2010/11 caused extreme, lasting damage to road and rail networks locally and nationally. The general public voiced their disappointment and frustration via MPs, councillors and social media. The fundamental problem of under-investment was addressed by Government via the Department of Transport (DfT) and the Highways Maintenance Efficiency Programme. A number of innovative measures were introduced to address this threat to national transport infrastructure and the economic performance of the country. Finance is provided to local highway authorities in the form of:

- Severe Weather Fund.
- Pothole Action Fund.
- Incentive Fund.
- Challenge Fund.

The Incentive Fund requires authorities to assess their performance against published criteria annually. High performing authorities are rewarded with maximum funding, whilst poor performing authorities receive less funding.

Challenge Funding is available to authorities who submit worthwhile applications for large scale maintenance projects to the DfT.

In 2012 comprehensive reports were published reviewing the prevention of potholes and the management of highway drainage. This Council readily accepted this guidance and effectively and efficiently monitors its performance against the recommendations. The authority maintains its position in the vanguard when trying, assessing and adopting new ideas, methods and techniques. This enables the authority to continue to improve its levels of service whilst simultaneously reducing associated costs.

### 1.1 Asset Management Policy, Strategy & Procedures

The Asset Management Policy is the highest level document and acts as a keystone in the Asset Management Framework; it defines aims, targets and goals. This strategy builds on these ideals and enables the fulfilment of the policies targets and goals. It makes reference to and is supported by a number of procedural documents some of which are specific to asset groups others overlap two or more areas.

This document builds on the advice contained in the code of practice "Well Managed Highway Infrastructure" and the guidance document 'Highway Infrastructure Asset Management' both published by the UK Roads Liaison Group. The Council is committed to developing asset management in line with ISO 55000.

As diminishing budgets continue to present increasing challenges there is a clear and unambiguous need to carefully husband all available resources and to use asset management techniques to prudently direct, target and focus maintenance to the areas of the asset where it will be most beneficial.

In July 2016 Blackburn with Darwen Council entered into a partnership with Capita to manage the operational highway service. The Council's client function is delivered by two teams providing technical and strategic functions respectively. Maintenance works are carried out by the Council's own workforce supplemented by specialist contractors as necessary. In 2018 the council took back core highway service from the Capita Partnership. The Highways Service delivers highway maintenance across the Borough. This service is organised into six teams:

- Highways.
- Street Lighting.
- Drainage.
- Traffic signals.
- Aids to Movement.

Associated documents:

- Highway Safety Inspection Procedure.
- Skid Resistance Policy
- Surface Dressing Policy
- Winter Maintenance Policy
- Gully Cleaning Policy
- Resilience Strategy
- Highways Plan
- Surfacing Plan

## 1.2 Objectives

The objectives of this strategy are:

- Direct investment in the highway related assets on the basis of prevention is better than cure, having consideration to the Council's priorities, risk and the current condition of the assets to which the Highway Infrastructure Asset Management Plan and Highways Management Plan relates.

- Aim to improve the overall condition and explore the most cost effective maintenance treatments based on the whole life of the assets.

- Facilitate the development of cost-effective forward works programmes over a number of years based upon the principles of life cycle planning.

- Ensure the Council adheres to its duty of care under the Highways Act 1980.

To achieve this, the Council will:

- Undertake annual inventory and condition surveys of the infrastructure assets which are captured within this strategy. Make use of a specialist asset management software application to manage both effectively and pro-actively the data captured.

- Identify a programme of improvement works for infrastructure assets by the use of objective data captured via the annual condition surveys.

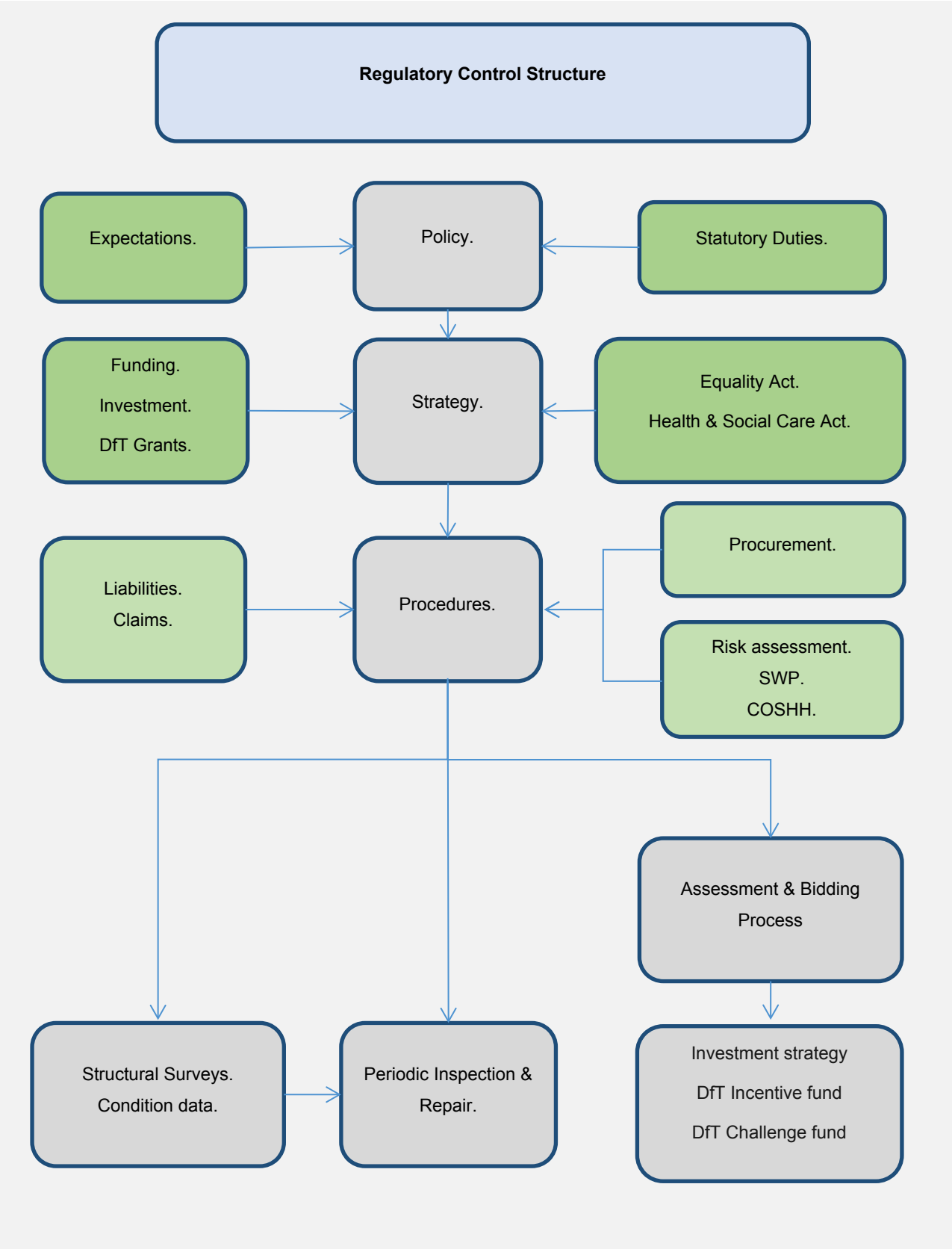
- Identify the most cost effective treatment for the asset group and work collaboratively with all stakeholders to embrace innovative new ways of working.

- Adopt a continuous improvement and review of practices in line with government and DfT changes.

Table 1. Work Areas.

| Sections | Duties | |
|---|---|---|
| Common areas | Local Transport Plan Input<br>Public Reports.<br>Elected member and MP queries | Contract Management.<br>Scheme design. |
| Highways | Asset Management.<br>Periodic planned inspection.<br>Reactive Infrastructure Repairs<br>Planned Maintenance Works.<br>Network Recovery<br>Statutory Regulatory Duties | Street Works<br>Performance<br>Out of hours, call out.<br>Winter maintenance.<br>Street furniture.<br>Condition Surveys |
| Structures | Asset Management<br>Planned maintenance works | Periodic planned inspection<br>Network rail liaison |
| Street Lighting | Asset Management<br>Periodic planned inspection.<br>Fault repair.<br>Electrical Safety Testing | Energy monitoring.<br>LED installation.<br>Cable maintenance |
| Drainage | Asset Management<br>Maintenance of highway drainage. | Gully cleaning.<br>Reactive inspection. |
| Traffic Signals | Asset Management<br>Reactive inspection. | Planned replacement. |
| Aids to Movement | Asset Management<br>Road-marking.<br>Road signs.<br>Street furniture. | Reactive inspection.<br>Road Safety.<br>Abnormal Loads. |

Table 2 Regulatory Control Structure.



### 1.3 Leadership and Commitment

The Council is committed to adopting good asset management practices in every maintenance activity it undertakes on the highway network. The Council is committed to improving performance in relation to asset management, resilience, customer and benchmarking and efficiency and operational delivery.

The Council has implemented the Code of Practice (CoP) 'Well-managed Highway infrastructure' which incorporates and replaces the UK Roads Liaison Group national codes of practice entitled 'Well Maintained Highways', Well-lit Highways' and 'Management of Highway Structures'. The Council will develop policies, strategies and procedures in line with the industry best practice guidelines produced by the Highway Maintenance Efficiency Programme (HMEP), a Department for Transport initiative to support local highway authorities on the journey to adopting asset management principles to manage their highway infrastructure assets.

The Council commits to building upon sound asset management principles and will intervene at the opportune time, in the right place and with the most cost effective solution. The 'worst first' approach has proved most costly overall and if this approach is pursued will lead to an overall deterioration of the asset even in times of optimal funding.

To deliver the strategy's commitments the Council will work with all stakeholders including; elected members, officers, residents and road users, to achieve a reduction in maintenance backlogs and a general improvement in assets over a ten year period.

The Council recognises that support from senior decision makers and officers is essential if asset management principles are to be adopted and successfully implemented throughout all layers of the Council.

The Council will consult widely with residents, partners and stakeholders on a regular basis, in order to gain an understanding of their priorities and inform its own corporate priorities and revenue budget settings. The Council, as local highway authority, will endeavour to ensure that its highway maintenance policies are as far as possible consistent and comparable with those of adjoining authorities. Currently the intervention tolerances and inspection frequencies contained in the Council's Highway Safety Defect Inspection Procedure closely match those of Lancashire County Council's policy and similar to those of Blackpool Council.

The Council's priorities are shown in Table 3 together with highways contribution to them.

Table 3. Council Priorities and Highway's Contribution

| Priority | Description | Contribution |
|---|---|---|
| 1. | Creating more jobs and supporting business growth. | Highway investment employing local people in highway maintenance. Providing infrastructure to encourage business investment. |
| 2. | Improving housing quality and building more houses. | Facilitating and enabling housing developments. |
| 3. | Improving health and well-being. | Safer roads, fewer accidents, healthier environment. |
| 4. | Improving outcomes for young people. | Training and apprenticeships. |
| 5. | Safeguarding the most vulnerable people. | Improved street lighting, improved mobility, cleaner gullies and drains. |
| 6. | Making your money go further. | Efficient use of budget, management of contractors. |

### 1.4 Performance

Measuring performance is an important part of the Council's commitment to the continued use of asset management principles to manage the road network holistically. Performance management allows it to measure our progress against strategic objectives. A performance management strategy has been developed and is set out in section 8. Performance results will be documented and reported annually in accordance with Part 9, the Asset Management Annual Update Briefing.

The views of all highway users, stakeholders and residents are important. The Council will continue to share progress via its website, ward briefings, resident surveys and other types of engagement.

### 1.5 Scope of this strategy

This strategy covers highway infrastructure assets for which Blackburn with Darwen Council acts as local highway authority. The major asset elements are: carriageways, footways & cycleways, structures, street lighting, traffic signals and Aids to Movement.

### 1.6 Risk based approach

The council has adopted the premise proposed in "Well managed Highway Infrastructure" that local highway authorities should adopt a risk based approach and

a risk based management regime for all aspects of its highway maintenance. There are no prescriptive or minimum standards in the Code. Adoption of a risk based approach, taking account of the advice in the Code, will enable the Council to establish and implement levels of service appropriate to their circumstances, aspirations and budgets.

The Council will consider the adoption of a risk based approach for all aspects of highway infrastructure maintenance, including setting levels of service, inspections, responses, resilience, priorities and programmes based on the provision of objective data.

The approach to asset management, key decisions regarding performance, investment and implementation of works programmes will be supported by risk assessment and management. The approach and decisions will be robust and informed by the analysis of objective data, attained via condition surveys and the recording of the performance of an asset. A risk management strategy has been developed and is set out in detail in Part 9.

An additional core objective is to manage all highway assets in one integrated asset management system. Accurate and fit for purpose robust data will be utilised to ensure accurate life cycle plans are developed to determine planned maintenance works. Robust data is key to delivering a first class service, a risk based approach to the maintenance of highway infrastructure assets and strategies for residents and road users.

### 1.7 Links to National Policy

Reports by the Audit Commission Going the Distance – Achieving better value for money in road maintenance, 2011; Highways Maintenance Efficiency Programme (HMEP), Potholes Review, Prevention and a Better Cure - 2012; HMEP, Guidance on the Management of Highway Drainage Assets, 2012; HMEP, Procurement Route Choices Toolkit, 2014 and the Chartered Institute of Public Finance and Accountancy (CIPFA), Code for Transport Infrastructure Assets, 2013 have placed a greater focus and pressure on local authorities to adopt good asset management principles to ensure that their highways are maintained in an efficient and appropriate manner.

The Council recognises the importance of an efficient, well maintained and well managed highway network if the economy of the borough is to develop and bring about sustained economic growth. It is anticipated that an improved highway network will not only help boost efficiencies with regards transporting goods to market, but an accessible highway network will also enable Blackburn and Darwen's residents to travel easily in order that they may take advantage of the improved employment opportunities with consequential benefits to their quality of life.

## 1.8 Legal responsibilities and duties

A considerable proportion of highway infrastructure maintenance activity is based upon statutory powers and duties. These duties and powers are contained within legislation and precedents developed over time as a result of claims and legal proceedings. Appendix 3 lists the relevant statutory legislation.

**The Adopted Highway** is the responsibility of the local highway authority, currently Blackburn with Darwen Borough Council. The Highways Act 1980 sets out the duties of the local highway authority in respect to highways maintenance. In particular, Section 41 imposes a duty to maintain the adopted highway at public expense.

The Highways Act does not specify the level of maintenance, although the Highways Maintenance Efficiency Programme (HMEP) provides advice and information to assist highway authorities to improve how they manage their highway infrastructure assets. A basic duty of care underpins many specific aspects of highway legislation. This principle should be applied to all decisions concerning highway management and maintenance.

The Localism Act, 2011 gives local authorities wide powers to act for the benefit of the authority and the community it serves. This Act introduced provisions for communities to challenge local authorities.

**Private streets** are the responsibility of the frontager. The Private Street Works Code, within the Highways Act, provides powers for local highway authorities to instruct frontagers to carry out works at their own expense to improve the condition of a private road to adoptable standard. A list of un-adopted roads is given in Appendix 4; this list is not exhaustive due to the difficulty in differentiating between roads, tracks, drives and private paths.

The **Traffic Management Act 2004** sets out a number of provisions for local highway authority duty for network management, permits for work on the highway, increased control of utility works and increased civil enforcement of traffic offences.

Various companies and utilities have statutory powers to work in the highway. Their activity in the highway is regulated by the **New Roads and Streetworks Act 1991** and by the **Traffic Management Act 2004.**

The **Health and Social Care Act 2012** requires, amongst other duties, the Council to:

- Promote and protect the public's health.
- Improve the health of local residents.
- Prevent risks to public health.
- Reduce health inequalities.
- To help people live longer healthier lives.

In the context of highway maintenance the Council will ensure that the highway is safe for all users and that all maintenance work promotes improvements in health as far as is practicable within budgetary constraints.

This Act incorporates various acts including the Disability Discrimination Act 1995. All highway users have the right to expect to be able to move freely. Whilst highways are constructed within the natural physical environment care should be taken to ensure that this service caters as far as is reasonably possible for all persons irrespective of any physical and/or mental impairment.

There can be circumstances where, due to particular site restrictions it may not be possible to accommodate persons with impaired mobility, in these cases all reasonable effort should be made to make alternate arrangements.

A general equality impact assessment has been carried out for this policy, Equality Impact Assessment. It indicates that these activities impact indirectly on service users/general public and that there no negative impacts on any protected characteristics. It concludes that specific equality impact assessments should be carried out for programmes of work within highways maintenance.

### 1.9 Staff

To deliver the strategies of the HAMP it is essential we ensure key asset management roles have been identified along with appropriate competencies. A competency framework will be developed and implemented, in line with the requirements of the publicly available specification 55/ISO55000.

The Council will invest in appropriate training to ensure competences are fit for purpose and up to date, in line with industry best practice.

All staff should receive training appropriate to their role in the organisation.

The Council will maintain a framework detailing what competencies are required for all roles within highway maintenance and the competencies of current staff. This information will be updated annually and will be form the basis of a training plan. The current competency matrix is given in appendix 5. The Highway Maintenance Efficiency Programme provides an online training course. The content is based on HMEP Highway Infrastructure Asset Management Guidance and is suitable for:

- Senior decision makers.
- Asset managers.
- Service providers.
- Practitioners.

The five-module training package has been developed covering the areas outlined below:

- Introduction to Asset Management.

- Policy, Strategy and Performance.
- Asset Data.
- Lifecycle Planning and Works Programming.
- Leadership and Going Further.

Regular reviews will be undertaken as part of an individual's development action plans to maintain an individual's competencies.

## Part 2 Investment and Delivery Strategy

### 2.1 Purpose

This strategy aims to build upon the successes of the recent four year £10 Million network recovery investment programme which has improved the condition of the Borough's classified road network and stabilised the unclassified network by consolidating the condition of the network to a steady state. Whilst this investment provided a good foundation for this strategy, the effective maintenance of the network will become ever more challenging due to continued financial pressures, these challenges offer opportunities for innovation in materials and methodologies. It is important we continue with a preventative approach to maintenance which should lead to a reduction in the annual investment required to maintain highway infrastructure assets.

This strategy is supported by an objective and detailed assessment of the current condition of each of the major asset groups identified within this strategy. This strategy uses that data and evidence to propose a highway network investment plan intended to improve the overall condition of the asset group and reduce the maintenance backlog therefore reducing future maintenance liability. Asset groups are divided into hierarchal sub groups as tabulated in Appendix 6.

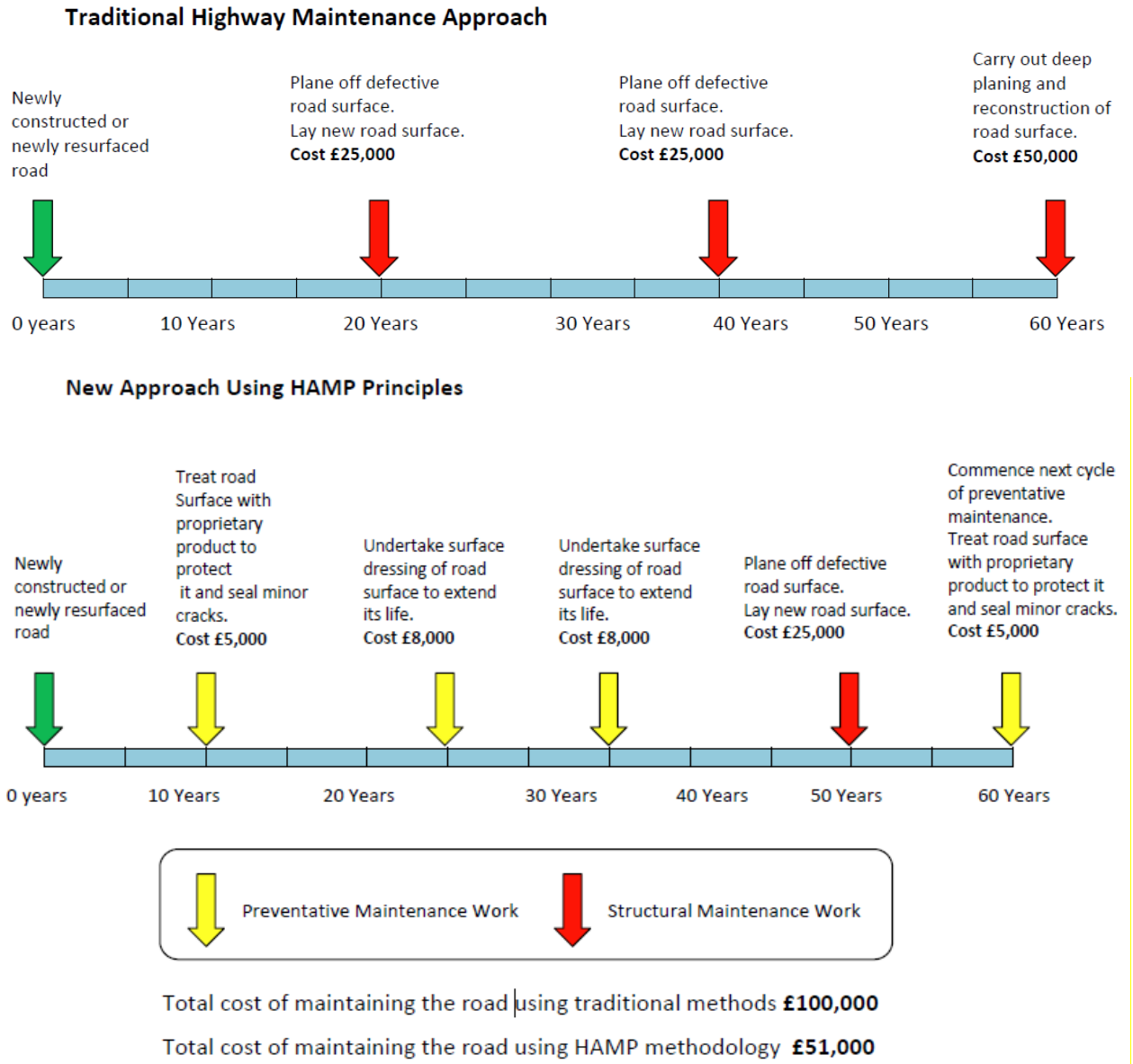
### 2.2 Lifecycle Planning

In line with current national guidance and best practice, the Council continues to develop its lifecycle approach to maintaining highway infrastructure assets. The durability and relative costs of specific maintenance treatments have been assessed,

The purpose of lifecycle planning is to maximise the life of assets with the minimum budget and resources. The lifecycle plans consider the whole of the assets' life and cost modelling diagrams. The investment required to maintain the asset over a long term period of 15 to 20 years for most highway assets; this will be over a much longer term for highway bridges and related structures, typically 100 years.

This approach enables planned maintenance to be carried out on the network at the right time in order to achieve value for money, delivering the agreed Levels of Service and achieving the objectives from performance monitoring and continuous improvement.

The illustration on the following page shows how a typical road might be maintained over 60 years. It compares and contrasts traditional maintenance practice with the new approach that the Council intends to adopt and it demonstrates how preventative maintenance can extend the life of the carriageway and lead to better value for money.




The above illustration shows that by applying highway asset management principles the whole life cost of maintaining the asset is greatly reduced. The use of preventative maintenance treatments at the optimum intervention timings extends the life of the asset reducing both reactive and planned maintenance.

## 2.3 Risk Management

The Council will proactively manage the highway infrastructure using systematic risk assessments to consider both the likelihood and severity of numerous events and possible mitigation measures. The approach to assessing and managing risks will be via the data collation exercise that underpins the informative approach for inspections of infrastructure assets. All major components of the infrastructure will be routinely inspected to permit a fully informed approach to assessing and managing risks and their mitigation.

The Council will agree condition standards that determine priorities and programmes for effective asset management through the adoption of best practice with continuous improvement to collect annual condition data.

The Council's strategy will continue to develop the risk based approach and will be guided by current industry best practice. This will support the risk based approach in managing risks posed and will also consider other risk areas, such as:

| | |
|---|---|
| Network loss or serious failure | Financial impact |
| Asset loss or damage | Contractual obligation |
| Reputational impact | Service reduction or failure |
| Environmental impact | Resilience of the network |
| Future growth demands | |

### 2.4 Forward Works Programme

The Council will compile and maintain a five year forward work programme for all major asset groups as defined in the introduction. The maintenance work to be carried out in the current year and the forthcoming year will be fully costed, approved by the Executive Member and published on the council's website. Indicative programmes for a further three years will be drafted; these will be prioritised to reflect anticipated budgets.

### 2.5 Materials, Testing, Technology and Innovation

The Council recognises that key to a successful Highway Asset Management Plan is the accuracy of the data which determines the forward works programme.

With ever changing specifications and advances in materials technology there are significant opportunities for the use of innovative materials and the recycling and reuse of what would have previously been waste materials from the existing infrastructure. The Council will endeavour to trial one or two new innovative products and processes per year, for example; patching works quality, mini paver and pothole repairs. Appropriate use of new and improved material and techniques allows the authority to continuously improve the performance of the network.

**Climate Change.**

The highway network needs to be resilient to climate change in order to minimise risk and delays to highway users and reduce forward costs.

- Appropriate use of wide temperature range binders in asphalt that remain flexible in low temperatures and do not soften in high temperatures.

- Appropriate use of sealing grit to prevent plucking and stripping of carriageways in periods of extreme heat.
- Appropriate gritting when sub-zero temperatures and/or snow are forecast, in accordance with the winter maintenance policy.
- Appropriate provision and maintenance of salt bins in accordance with the winter maintenance policy.
- Appropriate maintenance and cleansing of gullies and highway drains in accordance with the gully cleaning policy.
- Design and maintenance of street lighting equipment to cater for high wind speeds.
- Make reference to the Borough's Climate Change Adaptation Strategy and Action Plan.

**Feasibility and design assessment through appropriate, tailored site investigations:**

- Improved understanding of network condition to prioritise spend and reduce the potential for unexpected ground and material conditions which could result in additional delays and costs once on site.
- Impact on road users during construction will be minimised improving public perception. This will also significantly improve the robustness of the asset strategy which will in turn strengthen the case for funding applications.
- Identify and classify the presence of any tar bound or other potentially hazardous materials in existing highways in order to recycle / reuse as much material as possible and appropriately manage any residual waste; reducing costs and environmental impacts.

**Project / Programme Design and Contract Specifications:**

- Select materials and designs that optimise the use of the council's budgets.
- Ensure that contract specifications are clear and robust in appropriately placing responsibility for quality, durability and technical compliance on the supply chain. This is especially important with regards to Surface Dressing and Micro Surfacing programmes.

**Provide independent on site materials compliance testing during construction:**

- Ensure works are delivered 'right first time' maximising the durability of the highway.

- Eliminating delays, network disruption and costs in remedial works for premature failures.

The same approach to Highways Asset Management described above for annual capital maintenance works could/will also be adopted for new housing and development (S38 / S278) sites to ensure that the Council's requirements for these are appropriate and the completed infrastructure is sufficient and adequate to be adopted.

**2.6 Customers and Stakeholders**

The Council has participated in the NHT Public Satisfaction surveys since 2015 to measure the public's satisfaction with the network and what elements they think are of greatest importance. The NHT survey collects public perspectives of and satisfaction with, Highway and Transport Services in the Borough. It is a unique, standardised, collaboration between Highway Authorities across the UK, it gives:

- A better understanding of how they are performing in the eyes of their public.
- A consistent datum for setting service levels and a means of measuring the impact of service improvements.
- Access to the best performers and the opportunity to learn from the good practice of others.
- Full transparency of data for benchmarking purposes.

The use of the NHT survey by highway authorities is increasing from 79 in 2014 to 107 in 2016, to 113 in 2018.

The findings of the NHT survey undertaken in 2017 indicated our customers and stakeholders top priorities are:

- Management and maintenance of roads
- Gritting and roads & clearance of snow.
- Management and maintenance of road drainage and gullies.

These finding have been reported to the executive member as described in appendix 2.

The authority will describe and communicate upcoming maintenance schemes and major highway projects to residents and road users via the Council's website and by letter drop to those properties affected. When necessary we will develop bespoke communications plans for individual highway schemes should major disruption or delay be anticipated.

Major consultations took place in 2011, 2012 and 2015 in order to inform service cuts and corporate priorities, with engagement ranging from online surveys, to market stall voting, each of these consultations identified that highway maintenance and cleanliness were a key priority for residents. As such these matters continue to be priorities within the Council's Corporate Plan.

The Council also collects the public's views through NHT Public Satisfaction Surveys and Residents Surveys which includes how satisfied or dissatisfied they are with the cleanliness of streets and pavements and the general appearance of their local area.

Officers will continue to hold monthly meetings with the Executive Member responsible for highway maintenance and the two lead members and will report regularly to their Senior Policy Team meetings. Our Member Services team maintains a log of all Member requests. The Council also undertakes an elected member satisfaction survey.

Neighbourhood Teams regularly hold 'Ward Solution' meetings to consult and seek feedback on roads and, in particular, pot holes. The meetings are open to all residents of the particular ward and are generally chaired by Councillors. The meetings are held either bi-monthly or quarterly, road condition is one of the most popular topics. All remarks are logged, actions taken and progress reported at the next meeting, in addition progress logs are sent to everyone who attended the original meeting. These meetings assist the Council to work with local people to develop local solutions to their particular problems..

Residents of the Borough desire and deserve safe roads, cycle ways and footways that promote walking, with its consequential health benefits.

The Council recognises that local businesses indirectly benefit from a good quality resilient road network.

The Council's commitment to providing up to date relevant information to residents, road users and stakeholders is detailed in Part 3 Communication strategy.

### 2.7 Levels of Service

The strategy is intended to facilitate better decision making by providing robust technical data through the adoption of asset management practices, assessing this against the needs and aspirations of customers. In practical terms this means the identification and consideration of service level options.

Whilst there is  a statutory duty to maintain highways as outlined in the Highway Act 1980, there is no definition in the Act as to the standard of maintenance that is required.  In order to promote consistency of provision across the country, the Department for Transport (DfT) and the UK Roads Liaison Group have produced

national codes of practice (CoP). The current code, titled "Well Managed Highway Infrastructure" provides guidance on a range of highway maintenance activities. This code replaces the former codes, 'Well Maintained Highways, 'Well-lit Highways', 'Management of Electronic Traffic Equipment' and 'Management of Highway Structures'.

The UK Roads Liaison Group and the DfT recommend that local authorities implement this updated CoP as it contains current best practice which facilitates more effective and efficient maintenance of the highway and which will enable a more robust defence of third party claims. This strategy and its supporting documents therefore follow this guidance.

The levels of service for the various highway asset groups are:

| | |
|---|---|
| Statutory minimum | Meeting only statutory, safety and legislative requirements. |
| Minimum | The effect of reducing funding levels to regular revenue and LTP allocations and removal of other funding allocations. |
| Existing | The effect of continuing with current funding retaining. |
| Requested | The effect of providing additional funding above what currently exists based on customer expectations and political aspirations. |
| Optimum | The ideal amount of funding required to support optimal levels of service. |
| Attainable | Re-alignment of optimum service level taking in account the resources that are realistically available e.g. budget and staffing constraints. |

Setting service levels supports:-

- Planned maintenance of the network;
- Reduction of maintenance backlogs;
- Reduction of the year on year investment required to deal with natural deterioration of the asset;
- The best use of available resources;
- Transparency and accountability.

Adopting these levels of service will ensure the highway infrastructure assets maintenance backlog continues to reduce.

### 2.8 Service standards

Service standards are derived from condition data surveys, collected over a number of years and by engineering analysis and used to:

- Monitor the overall condition of the assets.
- Monitor the assets year on year performance.
- Compare overall progress against the previous years.

For carriageways and footways three levels of service standards have been identified EARLY LIFE, MID LIFE and LATE LIFE. Generic details of these service standards are shown in Appendix 1 of this document.

Setting service standards supports:

- Planned maintenance of the network.
- Reduction of maintenance backlogs.
- Reduction of the year on year investment required to deal with natural deterioration of the asset.
- The best use of available resources.
- Transparency and accountability.

### 2.9 Funding Constraints.

The Council's Highway Maintenance is funded form a number of different areas. Routine maintenance is supported by revenue funding, which comprises funds, provided by the Department for Communities and Local Government, from council tax and additional funds raised locally such as parking charges. Preventative and structural maintenance, which enhance the value of the asset, are funded by on capital maintenance allocations from the Department for Transport and local sources of capital. Government allocations are not 'ring fenced' for the purpose and the amount of funding spent on highways is determined locally based on intelligence and data collation. Other capital funding mechanisms include use of local capital receipts and borrowing.

Key funding sources for local infrastructure:

| Source | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|---|---|---|---|---|
| Revenue | £517,700 | £517,700 | £517,700 | £517,700 |
| LTP Capital Maintenance | £548,000 | £548,000 | £548,000 | £548,000 |
| Pothole Action Fund | £128,000 | £128,000 | £128,000 | £128,000 |

| | | | | |
|---|---|---|---|---|
| Highways Incentive Fund | £144,498 | £323,247 | £323,247 | £323,247 |
| Total | £1,338,198 | £1,516,947 | £1,516,947 | £1,516,947 |

- Highway maintenance capital block funding (needs formula).
- Incentive Fund.
- Revenue Fund.
- Pothole Fund.

The HAMP is based on the adoption of asset management best practices and principles which contribute towards the Council's goal of delivering an effective and robust highway network, which is crucial in developing the economic growth of the local economy for Blackburn with Darwen, both with new housing and employment. These goals integrate with the wider social and environmental aspirations set for the future.

### 2.10 Maintenance Backlogs

All highway infrastructure assets deteriorate through damage, wear and tear, ageing, increasing traffic and severe weather events, all of which require additional maintenance.

If the maintenance backlog can be reduced to a level broadly consistent with the annual rate of deterioration, then the resources available should ensure that no deterioration or only marginal deterioration occurs. At this point a 'steady state' has been achieved. If available resources are insufficient to sustain a steady state network then the condition of assets will begin to decline and the Council will then need to prioritise work and review their levels of service accordingly.

The Council's initial service standards have been developed and are in the main determined by the current condition of the asset, which in turn is heavily influenced by the level of deterioration and maintenance backlog within the asset base.

In respect to the assets covered by this strategy, there will inevitably be differences in the condition of each asset grouping. To some extent this is determined not only by the intervention intervals but also treatment and remediation options.

The condition of each infrastructure asset will be reviewed on an annual basis and reported via a briefing note to the executive member, describing the current condition and comparing it with historical information and expectations.

The current austere economic climate makes it more important than ever that the authorities' strategic plans focus resources where they can achieve the best overall long term value.

This strategy recognises the potential conflict between addressing highly visible, but fundamentally, superficial surface deterioration and failing to address less visible sub-surface problems which could lead to complete structural failure.

The focus therefore is to support optimal intervention to maximise the effect on the condition and life of the highways asset.

### 2.11 Asset Valuation

The comprehensive gathering of inventory and condition data and subsequent processing by our asset management system, enables us to calculate the overall value of highway and infrastructure assets. HM Treasury require the authority to report the Gross Replacement Cost of the highway network and the Depreciated Replacement Cost. At the time of writing HM Treasury and DfT are discussing the most efficient method to capture and report this information.

### 2.12 Asset management system

Effective ICT systems and accurate condition data is the cornerstone of the Councils strategy. In recent years we have made considerable investment in a computerised integrated asset management system. The authority continues to work with partners to capture, interrogate, manage and analyse information. Our systems holds extensive amounts of highway related data which enables us to effectively manage our assets; plan future maintenance schemes; implement and monitor the risk based approach to managing assets. Lighting assets are managed within Mayrise which is a specialised data management system.

### 2.13 The Introduction of the Self-Assessment Questionnaire by the Department for Transport (DfT)

To encourage local authorities to adopt good asset management practices, DfT introduced an incentive fund element alongside revisions to the maintenance formula funding mechanism. Highway authorities are required to complete an assessment against a set of criteria allowing authorities to demonstrate that efficiency measures are being pursued.

The self-assessment bands are based on the maturity of the authority in key areas, which are described in each question. The principle on which the levels of maturity for each question were determined is described as follows:

- Band 1 – has a basic understanding of key areas and is in the process of taking it forward;

- Band 2 – can demonstrate that outputs have been produced that support the implementation of key areas that will lead towards improvements;
- Band 3 – can demonstrate that outcomes have been achieved in key areas as part of a continuous improvement process.

A local authority's Band will be based on their score in the self-assessment questionnaire.

Details of the 'incentive bands' and funding for future years are shown below.

Table 4

| Year | Indicative incentive element by "band" of self-assessment ranking (£) | | | Potential Loss Band 3 to Band 2. | Potential Loss Band 3 to Band 1. |
|---|---|---|---|---|---|
| | **Band 3** | **Band 2** | **Band 1** | | |
| 2016/17 | £107,036 | £107,036 | £96,332 | £0 | £10,704 |
| 2017/18 | £160,553 | £144,498 | £96,332 | £16,055 | £64,221 |
| 2018/19 | £323,247 | £226,273 | £96,974 | £96,974 | £226,273 |
| 2019/20 | £323,247 | £161,624 | £32,325 | £161,623 | £290,923 |
| 2020/21 | £323,247 | £96,974 | £0 | £226,273 | £323,247 |
| Total over 6 years | £1,237,330 | £736,405 | £321,963 | £500,925 | £915,368 |

Further information pertaining to the highway self-assessment questionnaire can be found by visiting the DfT's website.

### 2.14 Investment in the Highway Asset 2012 – 2016

The highway asset has historically been funded through capital programmes, which have formed part of the highway maintenance and integrated transport block grants received from the Department for Transport. The funds have formed part of the delivery of the local transport plan since 2001 and will continue to do so with the current development of the Local Transport Plan 4,

## 2.15 Investment in the Highway Asset 2019 – 2029

A fundamental principle of this strategy is to continue to move away from the philosophy of tackling 'worst first' and expanding on the use of preventative maintenance, whereby the underlying condition of the network is addressed as we believe this will enable us to make more efficient use of our resources. The strategy adopts a flexible approach to addressing maintenance backlogs and will adopt a rolling forward programme which adapts to changes in resources as we go along. The highway and infrastructure maintenance is currently funded from the following sources:

- Local Transport Plan (LTP) – annual capital funding received from the Department for Transport (DfT).
- Revenue – annual revenue funding determined by the Department for Communities and Local Government (DCLG) relative needs formula and the Council Tax settlement.
- Other specific allocations – other sources of funding allocated either internally or externally.
- Pothole Fund.
- Incentive Fund.

An ongoing objective of the strategy will be to actively explore all possible sources of additional funding.

Revenue funding is un-likely to increase in the forthcoming years due to the current and continuing austerity measures implemented by central government, which will inevitably have an effect on the level of revenue funded routine maintenance programmes that we can undertake.

Revenue spending in the main does not improve the fabric of the asset and is largely used to ensure assets remain in a safe and serviceable condition until capital improvements are needed to replace worn out infrastructure. Revenue funding is used to repair potholes and localised footway defects in accordance with our highway maintenance policies and the capital programme is invested to prevent the occurrence of potholes in the first instance.

In recent years changes to the allocation of capital funding have been introduced by the Department for Transport and it is against this financial background that the revised HAMP 2019 – 2029 investment strategy is based. The proposed investment strategy will be reviewed in response to any variation in the actual level of resources made available, which may result in our delivery programmes and delivery timescales being adjusted as appropriate.

Table 5, below illustrates the forecasted annual highways and infrastructure budgets from 2017/18 (Year 1 of the HAMP) through to 2021/2022. The revenue funding is

based on an assumption that the annual allocation will remain static. The Local Transport Plan maintenance allocations from 2019/20 are indicative only.

The amount of Incentive Funding received is determined via the completion of the highway self-assessment questionnaire. Each local highway authority will score themselves against 22 questions and place themselves into one of 3 bands on the basis of the available evidence. In 2018/19, only authorities in band 3 will receive their full share of the Incentive Fund, whilst authorities in Band 2 will receive 90% of their share and band 1 will receive 60%. The percentages for Bands 1 and 2 will further decrease in subsequent years, with only authorities in Band 3 awarded their full share of the funding.

Table 5 provides a summary of the anticipated budgets that have been allocated to highway and infrastructure maintenance over the forthcoming 4 years

Table 5

| **Budget £000s** | **Description of funding source** | **2019/20** | **2020/21** | **2021/22** | **2022/23** |
|---|---|---|---|---|---|
| Revenue | Day to day highway repairs (e.g. potholes), patching programme, small planned road and footpath improvement schemes, drainage repairs, bridge repairs | £518 | £518 | £518 | £518 |
| DfT Capital | Needs based formula | £548 | £548 | £548 | £548 |
| DfT Capital | Incentive funding award (**to be confirmed) (*denotes level 3 funding attained) | £323 | £323 | £323 | £323 |
| Other Capital | Additional DfT budget – National Pothole Fund | £128 | £128 | £128 | £128 |
| | **TOTAL** | **£1,517** | **£1,517** | **£1,517** | **£1,517** |

These allocations may be subject to variance in response to emergency or unusually severe weather events.

A conclusion of this strategy is that the traditional approach of 'worst first only' in asset management will inevitably result in spiralling maintenance backlogs and a rapid deterioration of the highway asset network.

In order to reduce our maintenance backlog we propose to focus predominantly on preventative intervention works. Such works involve treatments that are generally

carried out at an earlier critical stage in an asset's life cycle and are usually less expensive and less invasive. It is anticipated that such an approach will reduce the rate of deterioration across the network.

### 2.16 Future Changes to the Asset

Blackburn and Darwen are thriving towns these burgeoning economies lead to a larger road network conveying larger traffic volumes. It is unlikely that future maintenance funds and resources will increase proportionally this demands holistic management to ensure that we continue to deliver a suitable transport network.

Other factors may affect delivery of the maintenance strategies include climate change and Brexit.

### 2.17 Key Recommendations

Maintenance interventions should be carried out at the most cost effective point.

A 'worst first' strategy should not be adopted.

Programme of maintenance should largely be planned prevention works with a smaller proportion of more invasive treatments where avoidable.

### 2.18 Current Condition of the Highway Assets

#### Carriageways

Table 6 details the condition of the carriageway asset over the last decade and the aspirational conditions over the period of this strategy.

Table 6 Carriageway condition

| Year | Percentage of carriageway where maintenance should be considered. | | | |
|---|---|---|---|---|
| | Resilient | Principal | Non-Principal | Unclassified |
| 2007/08 | | 4% | 13% | 9% |
| 2008/09 | | 4% | 10% | 13% |
| 2009/10 | | 4% | 11% | 13% |
| 2010/11 | | 4% | 10% | |
| 2011/12 | | 5% | 11% | |
| 2012/13 | | 4% | 11% | |
| 2013/14 | | 4% | 10% | 16% |
| 2014/15 | | 4% | 8% | |
| 2015/16 | | 4% | 6% | |
| 2016/17 | 2% | 3% | 4% | 10% |
| 2017/18 | 8% | 8% | 11% | 21% |
| 2018/19 | 2% | 2% | 22% | 10% |
| | | | | |
| 2020/21 | <3% | <5% | <7% | <11% |
| 2024/25 | <3% | <6% | <9% | <15% |
| 2026/27 | <3% | <6% | <10% | <20% |
| 2027/28 | <3% | <6% | <10% | <20% |
| 2028/29 | <3% | <6% | <10% | <20% |

This demonstrates the improvement to all aspects of the highway network in recent years and the minimum standard we aspire to in future years.

**Bridges and Similar Structures**

The performance of a bridge and similar structures is measured by its physical condition, recorded as part of the bridge evaluation criteria. The Bridge Condition Indicator (BCI) is a method of evaluating highway bridge data by calculating separate factors to obtain a numeric value which is used to indicate the bridges service potential.

Highway bridges are subject to periodic inspection to determine condition and to record defects. The Authority has adopted a risk based regime that accords with that set out in the Code of Practice.

A BCI is determined for each individual bridge based on its condition at the time of the inspection. The BCI is a nationally developed method endorsed by ADEPT.

As a guide the BCI values represent the following:

100 - 95 - Very Good Condition
94 - 85 - Good Condition
84 - 65 - Fair Condition
64 - 40 - Poor Condition
39 - 0 - Very Poor Condition

Calculation of the BCI provides a percentage value in which a value of 100 would represent a bridge that has retained 100% of its service potential, a value of 60 indicates that the bridge has lost 40% of its service potential, while a value of 0 implies that the bridge is no longer serviceable.

Bridge condition deteriorates at different rates according to the construction type, exposure conditions, traffic flows and maintenance regime adopted. It is a complex interaction of variables which makes forecasting trends very difficult.

An average value for the whole bridge stock, known as the Bridge Stock Condition Index ($BSCI_{AV}$) is also calculated based on the individual BCI values and is weighted by bridge deck area.

The Council is responsible for 186 bridges and similar structures and their condition data has been included for the purpose of evaluating the BCI for all our stock. The calculation of the overall BCI figure includes all General and any Principal Bridge Inspections completed in the last six years.

The Council's bridge stock has an average BCI value of 83 which is towards the top of the Fair condition bracket.

Condition values monitored over time indicate the bridge stock had gradually been improving over the years up until 2018/19 where the condition of the bridge stock appears to deteriorate. (please see the table below)

This trend was partially due to a large number of Principal Inspections being undertaken and the inclusion of newly identified structures into the bridge stock.

The increased detail of the Principal Inspections undertaken highlighted defects that could not be seen during a general inspection. The newly identified structures added to the bridge stock had not been subject to the same level of periodic maintenance. This resulted in the lowering of the average BCI values.

Through the prioritisation of maintenance works the average condition of the bridge stock has been improved.

Table 7

| Date | No of Spans | $BSCI_{AV}$ | $BSCI_{CRIT}$ |
|---|---|---|---|
| 2011/12 | 201 | 86 | 72 |
| 2012/13 | 202 | 86 | 73 |
| 2013/14 | 202 | 87 | 75 |
| 2014/15 | 205 | 87 | 78 |
| 2015/16 | 210 | 88 | 81 |
| 2016/17 | 226 | 89 | 83 |
| 2017/18 | 232 | 74 | 83 |
| 2018/19 | 249 | 83 | 68 |
| 2019/20 | | | |

Note: The number of bridges and spans has increased as a result of newly identified structures being added to the bridge stock.

**Footways**

Footway use varies widely; town centres, railway and bus stations, and health-centres experience heavy, daily footfall as do footways adjacent to schools and colleges. Footways adjacent to football grounds have intermittent heavy footfall whilst those within housing estates have very little footfall.

An inspection of a representative sample of the footway asset has enabled lifecycle plans to be developed. The absence of footway information should be addressed, to enable and facilitate location of sub-standard areas and subsequent repair. Surface course material, condition and area information should be collected, stored and analysed.

The Borough has a variety of different footway constructions although the extent of each type is not known.

- Bitmac; 3mm fine cold asphalt and 6mm close graded surface course.
- Concrete flags.
- Sandcarpet.
- Historic stone flags.
- New stone flags.
- Block paving.

The number of footway safety defects occurring is given below.

| Year | Footway Safety Defects |
|---|---|
| 2003 | 6,897 |
| 2004 | 5,828 |
| 2005 | 8,734 |
| 2006 | 7,494 |
| 2007 | 8,618 |
| 2008 | 7,100 |
| 2009 | 6,323 |
| 2010 | 3,574 |
| 2011 | 4,167 |
| 2012 | 4,108 |
| 2013 | 4,610 |
| 2014 | 3,539 |
| 2015 | 5,153 |
| 2016 | 5,256 |
| 2017 | 6,540 |

| | |
|---|---|
| 2018 | 9,710 |

As with carriageways footways are regularly inspected in accordance with the highway safety inspection procedure. Defects are recorded and repair is arranged in accordance with the stated target times, these actions reduce the potential for accidents and provide a safer environment for residents and highway users. The cost of repairing defects is a significant drain on labour resources and revenue funding.

Claims resulting from accidents on footways tend to be for larger amounts than carriageway related claims. Claims against the Council are a significant drain on financial resources, currently estimated at £200,000 pa.

The locations of accidents should be plotted and hotspots identified.

A detailed programme of repairs should be compiled, prioritised, maintained and costed to inform budget provision.

Investment in a programme of footway improvement should be carefully considered using lifecycle planning principals and evaluated by the Council to improve the footway condition and to address the maintenance backlog. Lifecycle plans shall be maintained for all elements of the footway network and shall be reviewed annually.

Desired outcomes and objectives:

- Continue to fulfil statutory duties.
- Establish footway inventory.
- Identify, cost and prioritise work required.
- Improve footway condition.
- Reduce trip hazards by 5% in 12 months.
- Achieve a sustainable footway network.
- Reduce claims against the Council by 5% in 12 months.
- Introduce geo-location of safety defects.

**Street Lighting**

The conclusion of the LED refit has significantly reduced power consumption with associated reduction in the power costs. Approximately 10% of street lighting columns were replaced during this refit programme as they were found to be badly corroded. Although the remaining lighting column stock is in reasonable condition at present they are expected to deteriorate rapidly without additional funding to support a replacement programme. Illuminated signs are in poor condition due to corroded columns. A number of illuminated bollards have been converted from mains to solar power, however limited funding precludes annual cleaning. The majority of illuminated units are connected to the mains grid; however 5,571 units are fed by Council owned cables

whose condition is unknown as they are not currently tested, contrary to British standard recommendations.

**Traffic Signals**
Traffic signals inspected every six months by the Traffic Signals Engineer and electrically inspected every two years by the signals maintenance contractor.

Bulk lamp changes carried out on halogen lamps approximately every 15 months, depending on overall lamp life and level of faults arising.

Mast arms to be structurally tested every five years.

Desired outcomes and objectives:

To reduce the percentage of stock over 20 years old to zero within five years.
To reduce the number of sites over 30 years old to zero within two years.

**Drainage**
Water can cause significant damage to the structure of the highway either by erosion or via freeze/thaw action. The Highway Authority will continue to take steps to ensure that it operates a sufficient and adequate highway drainage system in order to minimise these effects. Ensuring that highway gullies are operating and fit for purpose is therefore a crucial activity.

There are approximately 31,000 gullies on adopted highways within the Borough and 420 of them are defined as critical. A critical gully is defined as any gully, which if blocked or not working, would result or contribute to the flooding of a property or cause ponding to 25% of the width of the adjacent highway.

<u>Planned maintenance</u>

An annual gully cleansing schedule will be produced at the beginning of each financial year (April) to ensure that every gully is cleaned at least once every six years. To ensure that there is an element of maintenance throughout the network each year, the schedule will be based on the premise that each of the Borough's 17 wards will be attended for an average of 2 weeks per year.

All critical gullies will be attended twice per year as a minimum. There will also be targeted inspections on receipt of flood warning and cleaned as necessary prior to the event.

In addition to highway gullies there are 36 watercourse features including portals, with or without screens, and manholes which form part of the adopted highway; these have the potential to contribute to flooding and are therefore inspected at least twice a year, as are a further 22 Council owned off highway features. Any defects are noted and appropriate action is taken.

<u>Reactive maintenance</u>

There are numerous charted and uncharted highway drains and ditches within the Borough. Their repair is prioritised as and when defects become apparent.

**Aids to Movement**

Regulatory and informative signs and road-marking assist road users to use the network safely; this section includes:

- White lines
- Yellow lines
- High friction surfacing
- Road studs
- Non-illuminated signs

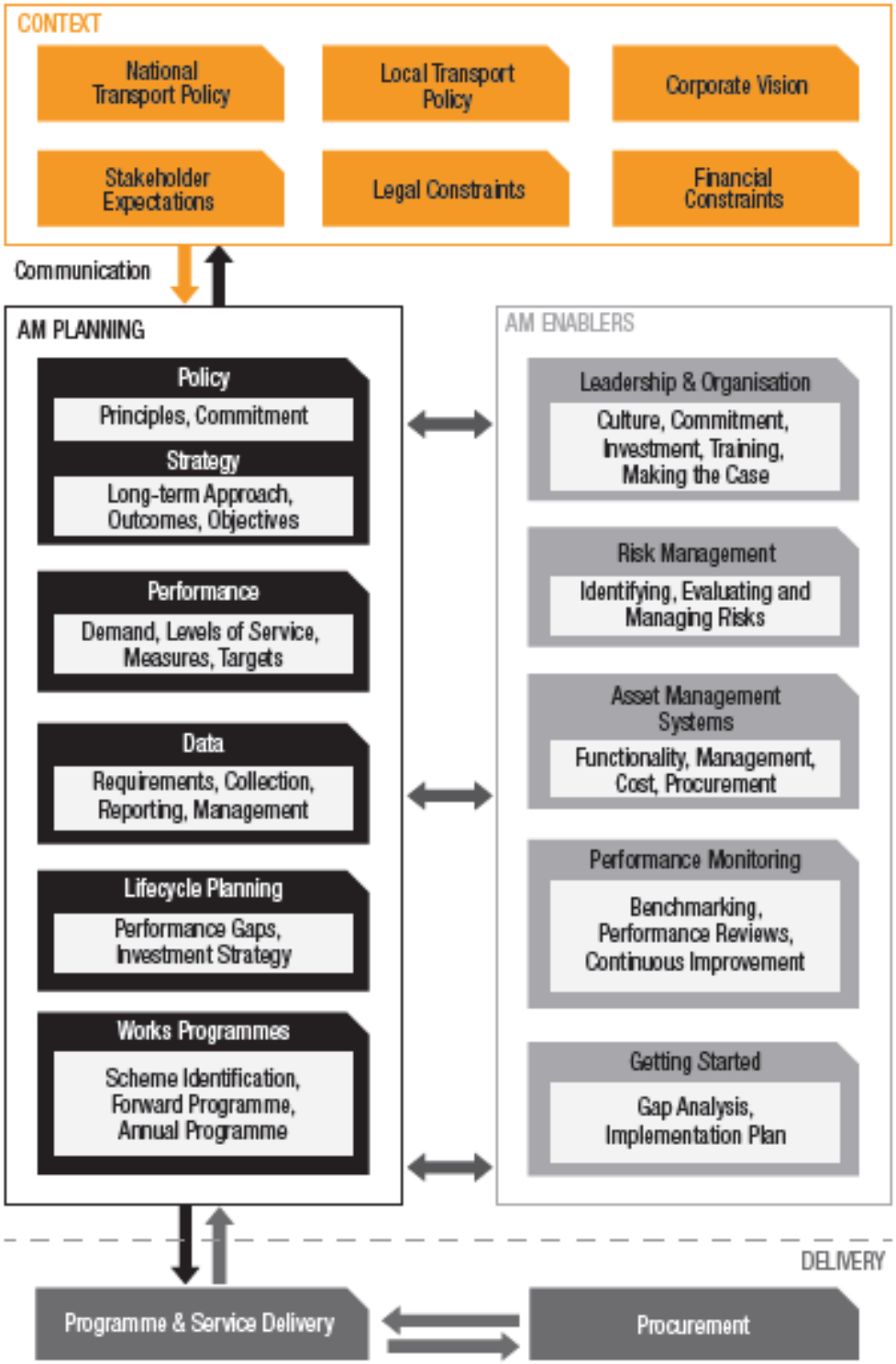
Whilst road signs are durable and long lasting road markings have a limited life, particularly transverse lines on classified roads. Currently the authority does not routinely inspect road markings; renewal is carried out on a reactive basis, priority is given to the resilient road network to ensure free flowing safe traffic movements on this critical infrastructure.

# Part 3 Highway Asset Management Framework

This section of the document is intended to be an overarching document that provides a framework for highway asset management.

## 3.1 Asset Management and the Organisational Context

Delivering highway asset management is a multi-faceted activity; its delivery is linked with the Council's policies and service delivery and supports the interface with all stakeholders. The diagram below illustrates the importance of highway infrastructure, illustrates the setting of national and local transport policy, requirements for stakeholder expectations and legal and financial constraints.


CONTEXT
National Transport Policy
Local Transport Policy
Corporate Vision
Stakeholder Expectations
Legal Constraints
Financial Constraints
Communication
AM PLANNING
Policy
Principles, Commitment
Strategy
Long-term Approach, Outcomes, Objectives
Performance
Demand, Levels of Service, Measures, Targets
Data
Requirements, Collection, Reporting, Management
Lifecycle Planning
Performance Gaps, Investment Strategy
Works Programmes
Scheme Identification, Forward Programme, Annual Programme
AM ENABLERS
Leadership & Organisation
Culture, Commitment, Investment, Training, Making the Case
Risk Management
Identifying, Evaluating and Managing Risks
Asset Management Systems
Functionality, Management, Cost, Procurement
Performance Monitoring
Benchmarking, Performance Reviews, Continuous Improvement
Getting Started
Gap Analysis, Implementation Plan
DELIVERY
Programme & Service Delivery
Procurement

# PART 4 Highways Asset Information Management.

### 4.1 Risk Based Approach

A risk based approach to the collection of data may be considered where the cost of data collection outweighs the benefit to the Council. In doing so, the Council will consider each asset group individually and take into account:

- Any historic concerns regarding the quality of existing data,
- How the data supports statutory requirements,
- The reputational consequence of network disruption, reduction in serviceability, etc. which may have been alleviated if data existed,
- Critical parts of the network,
- Safety of the network,
- How the data might reduce the long term cost of maintenance and assist long term investment decisions, and
- The critical nature of the asset in supporting the function of the network.

This publically accessible strategy document sets out the protocols for managing highway related data. Reference has been made to HMEP's Asset Management Guidance. Three main types of data are described these being inventory, performance and financial information.

Traditionally highway networks have been described using chainage and offset techniques borrowed from the surveying and mapping professions. Whilst this has been adequate and successful for many years the advent and increasing availability of GPS and GIS based systems allow us to move to area based coordinate systems, as pioneered by Gaist working with Blackpool Council using Dft Element 2 funding.

The fourfold advantages of such as a system are:

- Ease of use.
- Ease of modification/editing.
- Increased accuracy.
- Layering, allowing relevant information to be made displayed and accessed.

The Council's ultimate aim is to hold all highways data in a single integrated database that offers pertinent data to management staff to allow fully informed recommendations and decisions to be made.

In 2015 the highways asset management policy was approved by the Council's Executive Board, this document described the Council's commitment to the principals

of asset management for highway maintenance via a lifecycle planning approach supported by appropriate and up to date data.

### 4.2 Objectives

Blackburn with Darwen Borough Council gathers and maintains data about the highways within the Borough to provide a sound basis for making investment decisions and for setting budget levels. The Council gathers data that is required to support both the asset management policy. This data not only describes the composition of the asset and its performance but also improves communication with stakeholders and helps us assess the risks to and those posed by the highway. Equally the data supports the Council in executing its statutory duties, sustains continuous improvement and aids and assists the Council's priorities of supporting businesses and making the highway users money go further.

### 4.3 Asset Systems

The Council currently operates several systems to hold and assess highways related data, each has its own particular merit and used in this way they presently provide the most efficient and cost effective way of recording, maintaining and making available appropriate data.

- Highway condition data is recorded on Gaist's system, where it can be accessed through a secure log-on procedure.
- Street lighting information is supported by Mayrise.
- Operational highways information is held within EXOR.
- National Street Gazetteer is held within EXOR.
- Public opinion is gauged through the NHT portal.
- Performance and costs are assessed through the CQC Measures2improve portal.
- Bridge and structures information is held in individual files and HMEP toolkits.

Whilst the lack of interaction and interoperability between the databases, especially Gaist/UKPMS/NSG, is not a particular hindrance the networks should be resolved into a single dataset as soon as practical.

### 4.4 Data Collection

Currently sufficient data is collected to allow and facilitate asset management in accordance with the principals of current Codes of Practice. However additional information would allow a higher level of service to be provided to all users. Information tables are given below which document:

- Current Inventory Data.
- Performance Data.
- Financial Data.

- Gap analysis and action plan.

The meta-data contained in these tables includes:

- The need for the data.
- The responsible owner.
- Statutory requirement, Yes/No.
- The availability of the data.
- The method of collection.
- The frequency and scope of refresh updates.
- Where and how the data is stored.
- Timescales for archiving or disposing of data, legacy issues.
- Staff time required.
- External costs.

### 4.5 Data Owner

The Highway Asset Manager is the overall 'data owner' and is responsible for annually reviewing the method of data collection, the percentage of the asset to be surveyed, and managing the collected data. The Highway Asset Manager is responsible for the annual 'Road Condition' returns to the Department for Transport.

### 4.6 Retention and Disposal of Data

The Council recognises the need to dispose or archive data when it is no longer relevant or is out of date. The Council also recognises the General Data Protection Regulations, specifically in relation to personal data; this is detailed on the Authority's website.

### 4.7 Statutory Data

Road Condition Statistics

The Department for Transport (DfT) require online surveys to be completed by local highway authorities covering the following topics:

- Carriageway Work Done Survey
- Skidding Resistance Survey
- (130-01) Principal roads where maintenance should be considered.
- (130-02) Non-principal roads where maintenance should be considered.
- (130-04) Carriageway work done treatment lengths.

The Ministry for Housing Communities and Local Government (MHCLG) require annual data returns from items on the 'single data list'. Further information is available on the single data list.

Road Length Statistics

Road length consultation (R199b) is a mandatory exercise issued by the DfT, with the support of the MHCLG who have previously used road length information to assist with its calculation of the Highways Maintenance Relative Needs Formula (RNF) within the Local Government Finance Settlement and for analytical purposes. The process forms part of the 'single data list' and local authorities are required to respond to the consultation.

The frequency and nature of the consultation can vary.. The exercise was primarily run in order to validate and improve the robustness of existing data sets on road length held by the DfT. This exercise was undertaken to assist the DfT in maintaining an up to date record of the national road network, improve statistics and inform funding decision. The main purpose of the consultations is to inform the funding allocations for local highway authorities made by DfT and DCLG.

Central government department's request for data is usually received by the Asset Manager who completes the relevant documents and returns to the DfT.

Data covers many areas of the service these are detailed in Tables 8, 9 & 10. Data is lacking in some areas these are detailed in Table 11 which includes an estimate of the indicative costs to overcome this shortfall. This action plan is revised annually.

The Council recognises that whilst data is expensive to gather and maintain its use achieves overall savings as it facilitates and enables targeted investment as required by the Asset Management Policy.

The accuracy and currency of data is paramount. Investment decisions founded on out of date or compromised data are suspect and may result in inefficient use of funds. Tables 8, 9 and 10 include stipulated refresh/update frequencies, these are to be monitored and recorded. The Council's Audit and Assurance section will provide assurance on the systems and processes in place to manage the Highways data in accordance with the internal audit planning strategy and methodology. This area will be considered by Audit & Assurance as part of the process to agree the annual internal audit plan, which prepared on a risk based approach.

Data will be updated at the frequencies shown in tables 8, 9 and 10. Meta-data will record the update history; it will be made available to relevant staff as defined in the tables. The meta-data should consist of:

- Source of the update.
- Officer making the update.

- Officer checking the update.
- Revision date.
- All relevant calibration documents

### 4.8 Inventory Data

Accurate knowledge of the composition of the highway asset gives greater confidence in decisions relating to highway maintenance. Given the Council's high level of investment in development of its transport network there is a clear need to maintain and update this information. Information currently held is given in table 8, which is summarised below.

Table 8 Summary, Current Inventory Information

| Item | Subject | Statutory | Staff Time (Days per annum) | External Cost |
|---|---|---|---|---|
| | **Total** | | **71** | |
| 1 | Adopted streets | Y | 5 | - |
| 2 | Adopted streets register | Y | 5 | - |
| 3 | Network diagram | N | 5 | - |
| 4 | Adopted front street | N | 2 | - |
| 5 | Adopted Pavements | N | 2 | - |
| 6 | Adopted Back streets. | N | 2 | - |
| 7 | PROW. | Y | 5 | - |
| 8 | Guliksen footways | N | 2 | - |
| 9 | Street Lighting | Y | 10 | - |
| 10 | Structures. | Y | 2 | - |
| 11 | Parking Restrictions. | N | 4 | - |
| 12 | NRSWA. | Y | 4 | - |
| 13 | Highway Inspection Risk | N | 5 | - |
| 14 | Resilient network. | Y | 2 | - |
| 15 | Gritting Routes. | Y | 2 | - |
| 16 | Grit Bins. | Y | 2 | - |
| 17 | Road Signs. | Y | 4 | - |
| 18 | Gullies | Y | 4 | - |
| 19 | Culverts. | Y | 2 | - |
| 20 | Flood Risk Gullies. | Y | 2 | - |

Table 8 Current Inventory Information

| | | | | | |
|---|---|---|---|---|---|
| Item: | 1 | Subject: | Adopted streets. | Staff Days: | 5 |
| Description: | Defines the extent of the adopted highway. | | | Survey cost: | |
| Value: | Permits compliance with Statutory requirement. | | | Statutory Duty: | Yes. |
| Risk: | Reputational damage. | | | Code of Practice: | No. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\capita symonds\AdoptedStreets | | | Platform: | Mapinfo layer. |
| Source: | Plotted from OS background and site drawings. | | | Style: | Closed polygons. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | |
| Principal Information: | Road name. | Date adopted. | Town. | | |
| | Date adopted. | Road class. | | | |
| | Length. | Date closed. | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 2 | Subject: | Adopted streets register. | Staff Days: | 5 |
| Description: | Lists adopted streets. | | | Survey Costs: | |
| Value: | Permits compliance with Statutory requirement. | | | Statutory Duty: | Yes. |
| Risk: | Reputational damage. | | | Code of Practice: | No. |
| Availability: | Highways staff.<br>Bungalow office, Davyfield. | | | Platform: | Ledger. |
| Source: | Historic records. Site drawings. Adoption papers. | | | Style: | Hard copy. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | |
| Principal Information: | Road name. | Town. | | | |
| | Date adopted. | Road class. | | | |
| | Length. | Date closed. | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 3 | Subject: | Network Diagram. | Staff Days: | 5 |
| Description: | Models the extent of the adopted network. | | | Survey cost: | |
| Value: | Permits geospatial modelling of the highway network. | | | Statutory Duty: | No. |
| Risk: | Failure to complete DfT & Treasury returns, inaccuracy affects formula funding. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways\update_net | | | Platform: | Mapinfo layer. |
| Source: | Plotted from OS background. | | | Style: | Polylines. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant elements after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Road name. | | Environment. | | Footway hierarchy. |
| | Feature ID. | | Road class. | | Speed limit. |
| | Type. | | Carriageway hierarchy. | | Resilient Y/N |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 4 | Subject: | Adopted front street. | Staff Days: | 5 |
| Description: | Models the extent of the adopted carriageways. | | | Survey Costs: | |
| Value: | Used for WGA and for estimating work programme costs. | | | Statutory Duty: | No. |
| Risk: | Failure to complete Treasury returns. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways | | | Platform: | Mapinfo. |
| Source: | Derived from OS topographic layer and adopted streets layer. | | | Style: | Polygons. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant polygons after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Road Name | | Road Class | | |
| | Area sqm | | Town. | | |
| | Environment. | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 5 | Subject: | Adopted pavements. | Staff Days: | 2 |
| Description: | Models the extent of the adopted footways. | | | Survey cost: | |
| Value: | Used for WGA and for estimating work programme costs. | | | Statutory Duty: | No. |
| Risk: | Failure to complete Treasury return. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways | | | Platform: | Mapinfo layer. |
| Source: | Derived from OS topographic & adopted layers. | | | Style: | Closed polygons. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant polygons after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Road name. | Town. | | | |
| | Area. | | | | |
| | Environment. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 6 | Subject: | Adopted back streets. | Staff Days: | 2 |
| Description: | Models the extent of the adopted back streets. | | | Survey Costs: | |
| Value: | Quantifies the extent of the back streets. | | | Statutory Duty: | No. |
| Risk: | Inability to accurately quantify the extent of the asset. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways | | | Platform: | Mapinfo. |
| Source: | Derived from OS topographic & adopted layers. | | | Style: | Closed polygons. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant polygons after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Road name. | | | | |
| | Town. | | | | |
| | Area. | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 7 | Subject: | PROW. | Staff Days: | 5 |
| Description: | Defines the extent & location of public rights of way . | | | Survey cost: | |
| Value: | Maintains the definitive map. | | | Statutory Duty: | Yes. |
| Risk: | Inability to accurately quantify the extent of the asset. | | | Code of Practice: | No. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\capita symonds\PROW | | | Platform: | Mapinfo layer. |
| Source: | Derived from OS topographic & adopted layers. | | | Style: | |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | PROW staff. |
| Principal Information: | Path Reference. | | Ward. | | |
| | Path Type. | | | | |
| | Parish. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 8 | Subject: | Guliksen footways. | Staff Days: | 2 |
| Description: | Social landlord footways returned to highway authority. | | | Survey Costs: | |
| Value: | Identify extent of highway authority responsibility, facilitate periodic safety inspection. | | | Statutory Duty: | No. |
| Risk: | Potential risk to users if footways are not maintained. | | | Code of Practice: | No. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\capita symonds\Gulliksen Final | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background layer. | | | Style: | Closed polygons. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | Asset Management. |
| Principal Information: | Geographical Position. | | | | |
| | | | | | |
| | | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 9 | Subject: | Street Lighting. | Staff Days: | 10 |
| Description: | Records the position of street lighting columns. | | | Survey cost: | |
| Value: | Allows this major asset to be quantified and enables Treasury reporting. | | | Statutory Duty: | No. |
| Risk: | Failure to complete Treasury returns. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | Street lighting staff. | | | Platform: | Mayrise. |
| Source: | Plotted from OS background layer. | | | Style: | Point information |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Lighting staff. |
| Principal Information: | Column type. | | | | |
| | Column height. | | | | |
| | Lantern type. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 10 | Subject: | Structures. | Staff Days: | 2 |
| Description: | Records position of bridges, culverts and retaining walls. | | | Survey Costs: | |
| Value: | Allows this major asset to be quantified and enables Treasury reporting. | | | Statutory Duty: | No. |
| Risk: | Failure to complete HMT returns. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\capita symonds\Bridges | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background layer. | | | Style: | Points and closed polygons. |
| Refresh: | Annually. | Confidence: | Medium. | Quality: | Medium. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Structures. |
| Principal Information: | Inventory data. | | Health and Safety data. | | |
| | Legal data. | | | | |
| | Review Date. | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 11 | Subject: | Parking restrictions. | Staff Days: | 4 |
| Description: | Records position of parking restrictions. | | | Survey cost: | |
| Value: | Permits enforcement, maintains safety for highway users. | | | Statutory Duty: | Yes. |
| Risk: | Increased risk and congestion for road users. | | | Code of Practice: | Yes. |
| Availability: | Traffic staff. | | | Platform: | Parkmap. |
| Source: | Plotted from OS background. | | | Style: | Polylines. |
| Refresh: | Bi-annually. | Confidence: | Medium. | Quality: | Medium. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Traffic. |
| Principal Information: | Type of Restrictions. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 12 | Subject: | NRSWA. | Staff Days: | 4 |
| Description: | Manage utility companies. | | | Survey Costs: | |
| Value: | Permits compliance with Statutory requirement. Control of utilities. | | | Statutory Duty: | No. |
| Risk: | Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | Highways staff. | | | Platform: | Exor. |
| Source: | Plotted from OS background. | | | Style: | |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | NRSWA. |
| Principal Information: | Road name. | Environment. | | Footway hieracrchy. | |
| | Feature ID. | Road class. | | Speed limit. | |
| | Type. | Carriageway hierarchy. | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 13 | Subject: | Highway Inspection Risk assessments. | Staff Days: | 5 |
| Description: | Records . | | | Survey cost: | |
| Value: | Identifies amenity facilities. | | | Statutory Duty: | No. |
| Risk: | | | | Code of Practice: | Yes. |
| Availability: | All staff. | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background. | | | Style: | |
| Refresh: | Annually. | Confidence: | Medium. | Quality: | Medium. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Transport. |
| Principal Information: | Inception date. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 14 | Subject: | Resilient network. | Staff Days: | 2 |
| Description: | Records the position of the resilient road network. | | | Survey Costs: | |
| Value: | Permits compliance with Statutory requirement. | | | Statutory Duty: | Yes. |
| Risk: | Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways\update_net | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background. | | | Style: | |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant elements after six years. | | | Responsibility: | Highways. |
| Principal Information: | Resilient flag within network diagram. | | | | |
| | | | | | |
| | | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 15 | Subject: | Gritting Routes. | Staff Days: | 2 |
| Description: | Records position of gritting routes. | | | Survey cost: | |
| Value: | Identifies winter maintenance routes. | | | Statutory Duty: | No. |
| Risk: | Road users unaware of safe routes. | | | Code of Practice: | Yes. |
| Availability: | All staff and public.<br>W:\GIS Data\Department Data\capita symonds\Gritting Routes | | | Platform: | Mapinfo & export to Google. |
| Source: | Plotted from OS background. | | | Style: | Polyline. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant elements after six years. | | | Responsibility: | Highways. |
| Principal Information: | Route status. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 16 | Subject: | Grit bins. | Staff Days: | 2 |
| Description: | Records the location of grit bins. | | | Survey Costs: | |
| Value: | Identifies assets for maintenance. Amenity value for highway users. | | | Statutory Duty: | No. |
| Risk: | Grit bins not refilled. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff & public.<br>\\admmxi\users\users2\Matthew_Joyce\asset\gazetteer\bins | | | Platform: | Mapinfo & export to Google. |
| Source: | Plotted from OS background. | | | Style: | Point information. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Highways. |
| Principal Information: | Location. | | | | |
| | Type. | | | | |
| | | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 17 | Subject: | Road Signs. | Staff Days: | 4 |
| Description: | Records position of road signs, both lit and unlit. | | | Survey cost: | |
| Value: | Complete inventory. | | | Statutory Duty: | No. |
| Risk: | | | | Code of Practice: | Yes. |
| Availability: | All staff. | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background. | | | Style: | Point location. |
| Refresh: | Annually. | Confidence: | Low. | Quality: | Low. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Traffic. |
| Principal Information: | Lit or unlit. | | | | |
| | Sign face. | | | | |
| | Pole height. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 18 | Subject: | Gullies. | Staff Days: | 4 |
| Description: | Records the location of highway gullies. | | | Survey Costs: | |
| Value: | Identifies and quantifies position and numbers of adopted gullies. | | | Statutory Duty: | No. |
| Risk: | Inability to quantify the maintenance requirement. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | All staff. W:\GIS Data\Department Data\RHN\Drainage\Gullies | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background. | | | Style: | Point location. |
| Refresh: | Annually. | Confidence: | Medium. | Quality: | Medium. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Drainage. |
| Principal Information: | Geographical position. | | | | |
| | | | | | |
| | | | | | |

Table 8 Current Inventory Information (contd)

| | | | | | |
|---|---|---|---|---|---|
| Item: | 19 | Subject: | Culverts. | Staff Days: | 4 |
| Description: | Records position of culverts. | | | Survey cost: | |
| Value: | Identifies culverts for which the Council is responsible. | | | Statutory Duty: | No. |
| Risk: | Highway authority culverts are not maintained, increased risk of flooding and associated damage. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\RHN\Drainage | | | Platform: | Mapinfo. |
| Source: | Plotted from OS background. | | | Style: | Polyline. |
| Refresh: | Annually. | Confidence: | Low. | Quality: | Low. |
| Currency: | Maintain all records. | | | Responsibility: | Drainage. |
| Principal Information: | Geographical position. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 20 | Subject: | Flood risk gullies. | Staff Days: | 2 |
| Description: | Records the location of critical highway gullies. | | | Survey Costs: | |
| Value: | Identifies and quantifies position and numbers of critical gullies. | | | Statutory Duty: | No. |
| Risk: | Inability to quantify extent of maintenance requirement. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | Highways and drainage staff.<br>W:\GIS Data\Department Data\RHN\Drainage | | | Platform: | Exor. |
| Source: | Plotted from OS background. | | | Style: | Point location. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Drainage. |
| Principal Information: | Geographical position. | | | | |
| | | | | | |
| | | | | | |

### 4.9 Performance Data

Knowledge of the condition of the network allows and requires maintenance programmes to be planned and approved. The usefulness of this data is limited by and dependent on its currency. Performance data is shown in table 9, which is summarised below.

Current performance information is tabulated below; much of this data is surveyed by external contractors. Economies of scale maybe achieved by:

- Combining procurement of similar surveys.
- Procuring several cycles of data collection.
- Joint procurement and collaboration with adjacent local authorities.

The surveys described in Table 9 allow us to intelligently target planned maintenance works. The financial benefit gained in this manner is many times the cyclic cost given in Table 9. The Council will continue to fund these surveys.

Current annual costs for these surveys is £28,000.

Table 9 Summary, Current Performance Information

| Item | Subject | Statutory | Staff Time (Days per annum) | External Cost |
|---|---|---|---|---|
| | **Total** | | **30** | **£28,000** |
| 21 | Scanner survey | N | | £6,000 |
| 22 | CVI Survey | N | | £4,000 |
| 23 | Skid Resistance Survey | N | | £3,000 |
| 24 | Electrical Survey | N | | |
| 25 | Safety Defects | N | | |
| 26 | Bridge Inspections | N | | |
| 27 | Traffic Counts | N | | £3,000 |
| 28 | Dashboard | N | | |
| 29 | Rock Salt | N | | |
| 30 | Gullies Cleaned | N | | |
| 31 | Carriageways | N | | |
| 32 | DfT Self Assessment | N | 30 | |
| 33 | Hand Arm Vibration | Y | | |
| 34 | Winter Maintenance | Y | | |
| 35 | Highways Video survey | N | | £12,000 |

Table 9 Current Performance Information.

| | | | | | |
|---|---|---|---|---|---|
| Item: | 21 | Subject: | Lighting columns. | Staff Days: | |
| Description: | Monitors the structural condition of the lighting columns. | | | Survey cost: | £12,000 |
| Value: | Used to identify potential maintenance schemes. | | | Statutory Duty: | Yes. |
| Risk: | Collapse due to corrosion. Accidents, injury, fatality. | | | Code of Practice: | Yes. |
| Availability: | Lighting staff | | | Platform: | Mayrise. |
| Source: | Procure from accredited external contractor. | | | Style: | Point. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Lighting. |
| Principal Information: | Road. | | Remaining life. | | |
| | Column number. | | | | |
| | Column Type. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 22 | Subject: | Gaist Footway Survey. | Staff Days: | 2 |
| Description: | Monitors the condition of the footway network. | | | Survey Costs: | £4,000 |
| Value: | Used to identify potential maintenance schemes. | | | Statutory Duty: | No. |
| Risk: | Ambiguous footway condition, inefficient use of budgets and resources. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways\Gaist | | | Platform: | Mapinfo. |
| Source: | Procure from accredited external contractor. | | | Style: | Polyline. |
| Refresh: | 25% annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years | | | Responsibility: | Asset management. |
| Principal Information: | Section label. | | Hierarchy. | | |
| | Road name. | | Environment. | | |
| | Class. | | Speed limit. | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 23 | Subject: | Skid resistance survey. | Staff Days: | |
| Description: | Monitors the skid resistance of selected areas of the adopted highway. | | | Survey cost: | £4,000 |
| Value: | Used to identify potential maintenance schemes.Information relayed to DfT. | | | Statutory Duty: | No. |
| Risk: | Ambiguous road condition, inefficient use of budgets and resources. Inability to complete DfT survey. | | | Code of Practice: | Yes. |
| Availability: | All staff.<br>W:\GIS Data\Department Data\Environment\Highways\skid | | | Platform: | Mapinfo. |
| Source: | Procure from accredited external contractor. | | | Style: | Polyline. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Section label. | | Start chainage. | | Investigatory Level. |
| | Road name. | | End chainage. | | CSC. |
| | Class. | | Investigatory Group. | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 24 | Subject: | Electrical Testing. | Staff Days: | 20 |
| Description: | Monitors the condition of the private cable network. | | | Survey Costs: | |
| Value: | Ensure electrical safety as recommended in appropriate Code of Practice. | | | Statutory Duty: | Yes. |
| Risk: | Potential increased risk of electrical danger. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | Street lighting staff. | | | Platform: | Mayrise. |
| Source: | Procure from accredited external contractor. | | | Style: | |
| Refresh: | One sixth annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Street lighting. |
| Principal Information: | Column number. | | | | |
| | Location. | | | | |
| | Earth loop impedance. | | | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 25 | Subject: | Safety Defects. | Staff Days: | 4½ FTE. |
| Description: | Inspection of the adopted highway. Used to identify safety defects and potential maintenance schemes. | | | Survey cost: | |
| Value: | Assists in improving safety for road users. | | | Statutory Duty: | Yes. |
| Risk: | Potential increased risk of injury to road users. Reputational damage. | | | Code of Practice: | Yes. |
| Availability: | Highways Inspection staff. | | | Platform: | Exor/iPad. |
| Source: | Highways inspection staff. | | | Style: | |
| Refresh: | Frequency defined by procedure. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | Highways Inspection. |
| Principal Information: | Text and mapped location of defect. | | | | |
| | Nature of defect. | | | | |
| | Target repair date. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 26 | Subject: | Bridge Inspections. | Staff Days: | 2 FTE |
| Description: | Inspection of adopted Bridges and Highway Structures. | | | Survey Costs: | |
| Value: | Assist in identifying potential maintenance schemes and in ensuring safety of structures for use by road users. | | | Statutory Duty: | Yes. |
| Risk: | Unidentified deterioration of structures, increased cost of repairs. Inefficient use of budget. | | | Code of Practice: | Yes. |
| Availability: | Bridge Inspection staff. S:\Highways\Highways Data\BRIDGES\01 General Information\3_Asset Management\5_BCI Master Spreadsheets | | | Platform: | Bridge condition indicators stored in bridge record. BAMS in development. |
| Source: | Bridge Inspection staff. May require confined space techniques and qualifications. | | | Style: | |
| Refresh: | GI 2 yrs. PI 6 yrs. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after twelve years. | | | Responsibility: | Structures. |
| Principal Information: | GI report on structural elements. | | | | |
| | PI report on all inspectable elements. | | | | |
| | | | | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 27 | Subject: | Traffic Counts. | Staff Days: | |
| Description: | Annual corden count. | | | Survey cost: | £3,000 |
| Value: | Informs town centre usage, facilities required. | | | Statutory Duty: | No. |
| Risk: | Increased delays, CO2 emmisions, poor air quality. | | | Code of Practice: | Yes. |
| Availability: | Transport Strategy team. | | | Platform: | Excel and Word. |
| Source: | Procure from accredited external contractor. | | | Style: | Test. |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Transport Team leader. |
| Principal Information: | Volumn by vehicle type. | | | | |
| | Pedestrians. | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 28 | Subject: | Dashboard. | Staff Days: | 12 days pa. |
| Description: | Current performance information. | | | Survey Costs: | |
| Value: | High visibility monitoring of current performance and imminent deadlines. | | | Statutory Duty: | No. |
| Risk: | Repair of arising safety defects may slip. | | | Code of Practice: | Yes. |
| Availability: | Highways staff. | | | Platform: | Intranet page. |
| Source: | Performance manager. | | | Style: | Graphical. |
| Refresh: | Weekly. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Performance manager. |
| Principal Information: | No. of defects completed on time. | | | | |
| | No. of defects approaching deadline. | | | | |
| | No. of defects over deadline. | | | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 29 | Subject: | Rock salt. | Staff Days: | 12 days pa. |
| Description: | Monitors the rock salt stocks. | | | Survey cost: | |
| Value: | Records tonnage of rock salt available. | | | Statutory Duty: | No. |
| Risk: | Inadequate salt stocks. | | | Code of Practice: | Yes. |
| Availability: | Highways staff. | | | Platform: | Vaisala. |
| Source: | Highways staff. | | | Style: | Vaisala. |
| Refresh: | Daily in season, annual survey. | Confidence: | Medium. | Quality: | Medium. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Highways staff. |
| Principal Information: | Grade/size. | | | | |
| | Tonnage. | | | | |
| | Deliveries. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 30 | Subject: | Gullies cleaned. | Staff Days: | 12. |
| Description: | Records number of gullys cleaned. | | | Survey Costs: | |
| Value: | Allows performance to be assessed/evaluated. | | | Statutory Duty: | No. |
| Risk: | Unknown efficiency. Rising costs. | | | Code of Practice: | Yes. |
| Availability: | Highways staff. | | | Platform: | Excel. |
| Source: | Highways staff. | | | Style: | Excel. |
| Refresh: | Weekly. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Drainage manager. |
| Principal Information: | Number of critical gullies cleaned. | | | | |
| | Number of non-critical gullies cleaned. | | | | |
| | | | | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 31 | Subject: | Carriageways resurfaced. | Staff Days: | 4 |
| Description: | Records which roads have been resurfaced. | | | Survey cost: | |
| Value: | Identifies and quantifies which assets have been resurfaced. | | | Statutory Duty: | No. |
| Risk: | Ignorance of asset history. Rising costs. | | | Code of Practice: | Yes. |
| Availability: | Highways staff. F:\asset\blackburn\carriageway_surf | | | Platform: | Excel. |
| Source: | Asset manager. | | | Style: | Text. |
| Refresh: | Quarterly. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | Asset management. |
| Principal Information: | Road name. | | Section. | | |
| | Date resurfaced. | | Material used. | | |
| | Road class. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 32 | Subject: | DfT Self Assessment. | Staff Days: | 60 |
| Description: | Records BwD's current status. | | | Survey Costs: | |
| Value: | Identifies our current performance, areas for urgent attention, anticipated incentive fund allocation. | | | Statutory Duty: | No. |
| Risk: | Potential loss of funds. Reputational damage. | | | Code of Practice: | No. |
| Availability: | Highways staff. \\op_nt_server\Shared\Highways\DfT_Evidence | | | Platform: | Excel, Word |
| Source: | Highways staff. | | | Style: | Excel, Word. |
| Refresh: | Quarterly. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | Asset management. |
| Principal Information: | Current score of questions 1 to 22. | | | | |
| | Current band. | | | | |
| | Appropriate evidence. | | | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 33 | Subject: | Hand Arm vibration. | Staff Days: | 50. |
| Description: | Record's employee's exposure to vibration. | | | Survey cost: | |
| Value: | Health and safety requirement. | | | Statutory Duty: | Yes. |
| Risk: | Potential exposure to excessive vibration. | | | Code of Practice: | No. |
| Availability: | Operational management. \\admmxi\place\Highways\HAMIS\Health & Safety Documents\HAV's | | | Platform: | Access database. |
| Source: | Operations manager. | | | Style: | |
| Refresh: | Weekly. | Confidence: | Medium. | Quality: | Medium. |
| Currency: | Maintain all records. | | | Responsibility: | Operations Manager. |
| Principal Information: | Time spent using individual machines. | | | | |
| | Standard exposure value. | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 34 | Subject: | Winter Maintenance. | Staff Days: | 16. |
| Description: | Records when highways have been gritted. | | | Survey Costs: | |
| Value: | Allows highway authority to demonstrate that roads have been treated against frost or snow. Measures amount of salt used. | | | Statutory Duty: | No. |
| Risk: | Inability to defend accusations that appropriate treatment has not taken place. | | | Code of Practice: | Yes. |
| Availability: | Operational management. | | | Platform: | Vaisala. |
| Source: | Operational management. | | | Style: | |
| Refresh: | Daily during gritting season. | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | Winter maintenance manager. |
| Principal Information: | Routes gritted. | | Finish time. | | Vehicle used. |
| | Date gritted. | | Spread rate. | | |
| | Start time. | | Driver. | | |

Table 9 Current Performance Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 35 | Subject: | Carriageway video survey | Staff Days: | |
| Description: | To survey the carriageway network, assess its condition. | | | Survey cost: | £24,000 |
| Value: | Allows identification and prioritisation of carriageway works. | | | Platform: | BAMS. |
| Risk: | Unknown condition, structural deterioation. Inability to accurately prioritise highway works. | | | Responsibility: | Structures. |
| Source: | Physical survey. | | | | Yes. |
| Refresh: | Two years. | | | Platform: | Web based video survey. Mapinfo. |
| Principal Information: | AS BD63/17. | | | | |
| | External survey (Gaist). | | | Style: | |
| | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Video of highway network. | | Length of network elements. | | |
| | Analysis of condition. | | Area of network elements. | | |
| | BRAYG rating. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 36 | Subject: | .Carriageway Footway Survey | Staff Days: | |
| Description: | To survey the footway network, assess and report its condition. | | | Survey cost: | £12,000 |
| Value: | Allows identification and prioritisation of footway works. | | | Statutory Duty: | No. |
| Risk: | Inability to accurately prioritise footway works. | | | Code of Practice: | Yes. |
| Availability: | All staff as applicable. https://assetstream.gaist.co.uk/features/#!/login https://video.gaist.co.uk/Blackburn/2018#/59e65e3135ebc738ed8af7c3/20180326/114231-392-Rear | | | Platform: | Web based video survey. Mapinfo. |
| Source: | External survey (Gaist). | | | Style: | |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Asset Management. |
| Principal Information: | Video of highway network. | | Length of network elements. | BRAYG rating. | |
| | Analysis of condition. | | Area of network elements. | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 47 | Subject: | Retaining Walls - General Inspection | Staff Days: | |
| Description: | Basic understanding of retaining walls | | | Survey cost: | £40,000 |
| Value: | Ability to prioritise maintenanace works. | | | Platform: | BAMS. |
| Risk: | Unknown condition, structural deterioration. | | | Responsibility: | Structures. |
| Source: | Physical survey. | | | | |
| Refresh: | Two years. | | | | |
| Principal Information: | AS BD63/17. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 46 | Subject: | Bridges - Principal Inspection | Staff Days: | |
| Description: | Detailed understanding of bridge structures. | | | Survey Costs: | £110,000 |
| Value: | Ability to prioritise capital and maintenanace works. | | | Platform: | BAMS. |
| Risk: | Unknown condition, structural deterioation. | | | Responsibility: | Structures. |
| Source: | Physical survey. | | | | |
| Refresh: | Six years. | | | | |
| Principal Information: | AS BD63/17. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 48 | Subject: | Retaining Walls - Principal Inspection | Staff Days: | |
| Description: | Detailed understanding of retaining walls | | | Survey Costs: | £160,000 |
| Value: | Ability to prioritise capital and maintenanace works. | | | Platform: | BAMS. |
| Risk: | Unknown condition, structural deterioration. | | | Responsibility: | Structures. |
| Source: | Physical survey. | | | | |
| Refresh: | Six years. | | | | |
| Principal Information: | AS BD63/17. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 49 | Subject: | Earhwortks - General Inspections | Staff Days: | |
| Description: | Basic understanding of earthwork structures. | | | Survey cost: | Unknown. |
| Value: | Ability to prioritise maintenanace works. | | | Platform: | BAMS. |
| Risk: | Unknown condition. | | | Responsibility: | Structures. |
| Source: | Physical survey. | | | | |
| Refresh: | Two years. | | | | |
| Principal Information: | AS BD63/17. | | | | |
| | | | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 50 | Subject: | Earthworks - Principal Inspections | Staff Days: | |
| Description: | Detailed understanding of earthwork structures. | | | Survey Costs: | Unknown. |
| Value: | Ability to prioritise capital and maintenanace works. | | | Platform: | BAMS. |
| Risk: | | | | Responsibility: | |
| Source: | | | | | |
| Refresh: | Six years. | | | | |
| Principal Information: | AS BD63/17. | | | | |
| | | | | | |
| | | | | | |

### 4.10 Financial Information

Knowledge of current and predicted budget positions is prerequisite to effective budget management for both capital and revenue funding streams. This information prevents and precludes both under and overspend, which in turn facilitates efficient, planned maintenance.

The information described in table 10 details how the authority governs its highway finances, this is summarised below.

Table 10 Summary, Current Financial Information

| Item | Subject | Statutory | Staff Time (Days per annum) | External Cost |
|---|---|---|---|---|
| | **Total** | | **113** | |
| 36 | Revenue Budget Monitoring | Y | 24 | |
| 37 | Capital Budget Monitoring | Y | 24 | |
| 38 | Stock Control | Y | 12 | |
| 39 | Procurement | Y | 12 | |
| 40 | Whole of Government Accounts | Y | 5 | |
| 41 | Decision Making | Y | 12 | |
| 42 | Internal Audit Reviews & reports | Y | 12 | |
| 43 | Internal Audit Advice | Y | | |
| 44 | Tenders Received | Y | 12 | |

Table 10 Current Financial Information

| | | | | | |
|---|---|---|---|---|---|
| Item: | 36 | Subject: | Revenue Budget Monitoring. | Staff Days: | 24 |
| Description: | Monitors performance against the revenue budgets set by the Council. | | | Survey Costs: | |
| Value: | Efficient use of funding. Allows compliance with standing financial instructions. | | | Statutory Duty: | Yes. |
| Risk: | Increased risk of over/under spending. | | | Code of Practice: | No. |
| Availability: | Management and cascaded as appropriate. | | | Platform: | Civica. Excel files. |
| Source: | Management. | | | Style: | |
| Refresh: | Updated monthly. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Head of Service. |
| Principal Information: | Staffing budget /costs. | | Commitment accounting. | | |
| | Non-staffing budget/costs. | | Income budget/costs. | | |
| | Road schemes in progress. | | Year end projection. | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 37 | Subject: | Capital Budget Monitoring. | Staff Days: | 24 |
| Description: | Monitors performance against the Highways scheme in the Council's capital programme. | | | Survey cost: | |
| Value: | Efficient use of funding. Allows compliance with standing financial instructions. | | | Statutory Duty: | Yes. |
| Risk: | Increased risk of over/under spending. | | | Code of Practice: | No. |
| Availability: | Management and cascaded as appropriate. | | | Platform: | Civica. Excel files. |
| Source: | Management. | | | Style: | |
| Refresh: | Updated monthly. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Head of Service. |
| Principal Information: | Scheme costs and budget. | | Year end projection. | | |
| | Performance against plan. | | | | |
| | Road schemes in progress | | | | |

Table 10 Current Financial Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 38 | Subject: | Stock Control. | Staff Days: | 12 |
| Description: | Monitors the levels of stock held in stores and track the purchases and issues throughout the year. | | | Survey Costs: | |
| Value: | Stock control. Compliance with standing financial instructions. | | | Statutory Duty: | No. |
| Risk: | Possible risk of too much or too little stock at any given time. Inefficient use of budgets. | | | Code of Practice: | No. |
| Availability: | All staff as appropriate. | | | Platform: | Financial & stores management system. |
| Source: | Stores staff. | | | Style: | Stock take. |
| Refresh: | Updated daily. Reconciled monthly. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Purchasing. |
| Principal Information: | Opening balance, quantity & value. | | Closing balance, quantity & value. | | |
| | Purchases. | | | | |
| | Issues. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 40 | Subject: | Whole of Government Accounts. | Staff Days: | 10 |
| Description: | Values the highways infrastructure asset. | | | Survey Costs: | |
| Value: | Identifies and demonstrates the monetary deterioration of the asset. | | | Statutory Duty: | Yes. |
| Risk: | Failure to comply with Treasury directives. | | | Code of Practice: | Yes. |
| Availability: | Management within the highway service. | | | Platform: | Civica. |
| Source: | Highways management. | | | Style: | |
| Refresh: | Annually. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Head of service. |
| Principal Information: | Highway inventory. | | Street Furniture inventory. | | |
| | Street Lighting inventory. | | Valuation of assets. | | |
| | Traffic Management inventory. | | | | |

Table 10 Current Financial Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 41 | Subject: | Decision making. | Staff Days: | 12 |
| Description: | Approval of Highways schemes and funding through the Council's agreed decision making processes. | | | Survey cost: | |
| Value: | Compliance with Council constitution. | | | Statutory Duty: | Yes. |
| Risk: | Compliance with Council constitution. | | | Code of Practice: | No. |
| Availability: | Management and published on internet. https://democracy.blackburn.gov.uk/ieDocHome.aspx?bcr=1 | | | Platform: | Internet. |
| Source: | Management. | | | Style: | |
| Refresh: | | Confidence: | High. | Quality: | High. |
| Currency: | Maintain all records. | | | Responsibility: | Head of Service. |
| Principal Information: | Location. | | | | |
| | Estimated cost. | | | | |
| | Nature of work. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 42 | Subject: | Internal audit reviews and reports. | Staff Days: | 12 |
| Description: | Reviews of key highways related systems and processes to provide assurance on the effectiveness of the controls in place. | | | Survey Costs: | |
| Value: | Assurance that functional systems are in place. Compliance with standing financial instructions. | | | Statutory Duty: | Yes. |
| Risk: | | | | Code of Practice: | No. |
| Availability: | Management within the highway service. | | | Platform: | Word & Scrutiny documents. |
| Source: | Highways management and appropriate Chief Officers. | | | Style: | |
| Refresh: | Risk based approach. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Audit & Assurance. |
| Principal Information: | Highways management system. | | Highways Asset valuation, data management strategy, highway asset management | | |
| | Stores management system. | | Highway Maintenance. Procurement and contracting | | |
| | Inspection and repair transactions. | | Deterioation of highway network | | |

Table 10 Current Financial Information (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 43 | Subject: | Internal audit advice. | Staff Days: | 3 |
| Description: | Advice to Highways management on request in respect of proposed changes to ensure that relevant policies, systems and/or, controls are adequate and in line with best practice. | | | Survey cost: | |
| Value: | Ensure proposed changes are viable, in line with best practice, and compliant with standing financial instructions. | | | Statutory Duty: | No. |
| Risk: | Uncontrolled procedures, reputational damage. | | | Code of Practice: | No. |
| Availability: | Management and cascaded as appropriate. | | | Platform: | Word & Scrutiny documents. |
| Source: | Management. | | | Style: | |
| Refresh: | On request. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Audit & Assurance. |
| Principal Information: | Highways management system. | | | | |
| | Stores management system. | | | | |
| | Transactional data for inspection and repair. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 44 | Subject: | Tenders Received. | Staff Days: | 12 |
| Description: | To maintain a record of tenders received. | | | Survey Costs: | |
| Value: | Compliance with procurement legislation, standing financial instruction. | | | Statutory Duty: | Yes. |
| Risk: | Complaints and challenges by tenderers. | | | Code of Practice: | No. |
| Availability: | All staff as applicable. | | | Platform: | The Chest. |
| Source: | Procurement. | | | Style: | |
| Refresh: | Each tender. | Confidence: | High. | Quality: | High. |
| Currency: | Archive redundant records after six years. | | | Responsibility: | Procurement. |
| Principal Information: | Work areas. | | Contracts appointed. | | |
| | Companies tendering. | | Waivers authorised. | | |
| | Documents received. | | | | |

## 4.11 Gap analysis and Action Plan

The Council is aware of shortcomings in its highways data and is actively working to fill these gaps. The action plan detailed in Table 11 describes these gaps and includes an implementation timetable together with indicative costs.

Table 11 Summary, Gap analysis and Action Plan

| Item | Subject | Statutory | Staff Time (Days per annum) | External Cost |
|---|---|---|---|---|
| | **Total** | | **120** | **£343,000** |
| 45 | Bridges General Inspection | N | | £14,000 |
| 46 | Bridges Principal Inspection | N | | £110,000 |
| 47 | Retaining Walls General Inspection | N | | £40,000 |
| 48 | Retaining Walls Principal Inspection | N | | £160,000 |
| 49 | Earthworks General Inspection | N | | To be determined |
| 50 | Earthworks Principal Inspection | N | | To be determined |
| 51 | Carriageway Network | N | 10 | £2,000 |
| 52 | Footway Network | N | 10 | £2,000 |
| 53 | Cycle Tracks | N | 10 | £2,000 |
| 54 | Back Streets | N | 10 | £2,000 |
| 55 | Traffic Calming | N | 10 | £2,000 |
| 56 | Pedestrian Crossing | N | 10 | £2,000 |
| 57 | White Lines | N | 10 | £2,000 |
| 58 | Vehicle Restraint system | N | 10 | £2,000 |
| 59 | Pedestrian Barriers | N | 10 | £2,000 |
| 60 | Cycle Storage | N | 5 | £1,000 |
| 61 | Alley Gates | N | 10 | |
| 62 | Bus Stops | N | 10 | |
| 63 | Street Nameplates | N | 5 | |

Table 11 Gap Analysis and Action Plan

| | | | | | |
|---|---|---|---|---|---|
| Item: | 51 | Subject: | Carriageway network. | Staff Days: | 10 |
| Description: | Define the construction of carriageways. | | | Survey cost: | £2,000 |
| Value: | To complement the existing extent and location information. | | | Platform: | Mapinfo. |
| Risk: | Inability to value the network. | | | Responsibility: | Asset management. |
| Source: | External Survey. | | | | |
| Refresh: | Collect over 10 years. | | | | |
| Principal Information: | Section label. | | Tar content. | | |
| | Construction layers. | | Construction materials. | | |
| | Condition. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 52 | Subject: | Footway Network. | Staff Days: | 10 |
| Description: | Define the construction of the footways. | | | Survey Costs: | £2,000 |
| Value: | To complement the existing extent and location information. | | | Platform: | Mapinfo. |
| Risk: | Inability to value the network. | | | Responsibility: | Asset management. |
| Source: | External Survey. | | | | |
| Refresh: | Collect over 10 years. | | | | |
| Principal Information: | Section label. | | Construction materials. | | |
| | Construction layers. | | | | |
| | Condition. | | | | |

Table 11 Gap Analysis and Action Plan (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 53 | Subject: | Cycle tracks. | Staff Days: | 10 |
| Description: | Define the extent, construction and condition of the cycle network. Prioritse maintenance. | | | Survey cost: | £2,000 |
| Value: | To complement the existing extent and location information. | | | Platform: | Mapinfo. |
| Risk: | Inability to value the network. | | | Responsibility: | Asset management. |
| Source: | External Survey. | | | | |
| Refresh: | Collect over 10 years. | | | | |
| Principal Information: | Location. | | Condition. | | |
| | Extent. | | | | |
| | On Road/Off Road. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 54 | Subject: | Back streets | Staff Days: | 10 |
| Description: | Define the constructionand conditionof the back street network. | | | Survey Costs: | £2,000 |
| Value: | To complement the existing extent and location information. | | | Platform: | Mapinfo. |
| Risk: | Inability to value the network. | | | Responsibility: | Asset management. |
| Source: | External | | | | |
| Refresh: | Collect over 10 years | | | | |
| Principal Information: | Location. | | Construction. | | |
| | Extent. | | | | |
| | Condition. | | | | |

Table 11 Gap Analysis and Action Plan (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 55 | Subject: | Traffic calming. | Staff Days: | 10 |
| Description: | Record the location of traffic calming features. Prioritise maintenance. | | | Survey cost: | £2,000 |
| Value: | Assist maintenance and safety of users. | | | Platform: | Mapinfo. |
| Risk: | Substandard inventory. | | | Responsibility: | Traffic manager. |
| Source: | External survey. | | | | |
| Refresh: | Collect over 10 years. | | | | |
| Principal Information: | Location. | | Condition. | | |
| | Type. | | Construction. | | |
| | Extent. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 56 | Subject: | Pedestrian Crossings. | Staff Days: | 10 |
| Description: | Record the location. Prioritise maintenance. | | | Survey Costs: | £2,000 |
| Value: | Assist maintenance and safety of users. | | | Platform: | Mapinfo. |
| Risk: | Substandard inventory. | | | Responsibility: | Traffic manager. |
| Source: | External survey. | | | | |
| Refresh: | Collect over 10 years. | | | | |
| Principal Information: | Location. | | Condition. | | Cable diagram. |
| | Extent. | | Construction. | | |
| | Type. | | Power Supply. | | |

Table 11 Gap Analysis and Action Plan (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 57 | Subject: | White lines. | Staff Days: | 10 |
| Description: | Location and type of roadmarking. Prioritise maintenance. | | | Survey cost: | £2,000 |
| Value: | Improved road safety. | | | Platform: | Mapinfo. |
| Risk: | Substandard inventory. Increased risk to road users. | | | Responsibility: | Traffic manager. |
| Source: | External survey. | | | | |
| Refresh: | Collect over 10 years. | | | | |
| Principal Information: | Location. | | | | |
| | Extent. | | | | |
| | Condition. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 58 | Subject: | Vehicle Restraint Systems. | Staff Days: | 10 |
| Description: | Location and type of barriers. Prioritise maintenance. | | | Survey Costs: | £2,000 |
| Value: | Improved road safety. | | | Platform: | Mapinfo. |
| Risk: | Substandard inventory. Increased risk to road users. | | | Responsibility: | Traffic manager. |
| Source: | External survey. | | | | |
| Refresh: | Collect over 5 years. | | | | |
| Principal Information: | Location. | | | | |
| | Type. | | | | |
| | Condition. | | | | |

Table 11 Gap Analysis and Action Plan (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 59 | Subject: | Pedestrian Barriers. | Staff Days: | 10 |
| Description: | Location and type of barriers. Prioritise maintenance. | | | Survey cost: | £2,000 |
| Value: | Improved road safety. | | | Platform: | Mapinfo. |
| Risk: | Substandard inventory. Increased risk to road users. | | | Responsibility: | Traffic manager. |
| Source: | External survey. | | | | |
| Refresh: | Collect over 5 years. | | | | |
| Principal Information: | Location. | | | | |
| | Type. | | | | |
| | Condition. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 60 | Subject: | Cycle storage. | Staff Days: | 5 |
| Description: | Availability of cycle storage. | | | Survey Costs: | |
| Value: | To define the extent, nature & condition of cycle storage. | | | Platform: | Mapinfo. |
| Risk: | Inability to prioritise maintenance. | | | Responsibility: | Transport. |
| Source: | As built drawings. | | | | |
| Refresh: | 2 years. | | | | |
| Principal Information: | Location. | | Key type. | | |
| | Type. | | Key location. | | |
| | Condition. | | | | |

Table 11 Gap Analysis and Action Plan (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 61 | Subject: | Alley gates. | Staff Days: | 10 |
| Description: | Location of gates, availability of access. | | | Survey cost: | |
| Value: | Maintenance prioritisation. | | | Platform: | Mapinfo. |
| Risk: | Inefficient maintenance. | | | Responsibility: | Traffic leader. |
| Source: | As built drawings. | | | | |
| Refresh: | Annual. | | | | |
| Principal Information: | Location. | Key type. | | | |
| | Type. | | | | |
| | Condition. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Item: | 62 | Subject: | Bus stops. | Staff Days: | 10 |
| Description: | Location of bus stops. | | | Survey Costs: | |
| Value: | Maintenance prioritisation. Street furniture. | | | Platform: | Mapinfo. |
| Risk: | Inefficient maintenance. | | | Responsibility: | Transport. |
| Source: | As built drawings. | | | | |
| Refresh: | Annual. | | | | |
| Principal Information: | Location. | | | | |
| | Type. | | | | |
| | Condition. | | | | |

Table 11 Gap Analysis and Action Plan (contd).

| | | | | | |
|---|---|---|---|---|---|
| Item: | 63 | Subject: | Street nameplates. | Staff Days: | 5 |
| Description: | Location of street nameplates. | | | Survey cost: | |
| Value: | Maintenance prioritisation. Street furniture. | | | Platform: | Mapinfo. |
| Risk: | Inefficient maintenance. | | | Responsibility: | Traffic leader. |
| Source: | Internal survey. | | | | |
| Refresh: | Annual. | | | | |
| Principal Information: | Location. | | | | |
| | Type. | | | | |
| | Condition. | | | | |

### 4.12 Freedom of Information Act, 2000.

Requests for information are routed through the Council's Freedom of Information Officer who will offer guidance on what information should and should not be released. Reference should be made to the Council's Freedom of Information Policy.

### 4.13 General Data Protection Regulations, (GDPR).

Generally highways data contains little personal data; however care should be taken to ensure that the provisions of the Act are not breached. Reference should be made to the Council's Data Protection Policy.

## Part 5 Performance Management

### 5.0 Performance Management Strategy

### Introduction

As a key element of this strategy, we have developed a performance management framework that defines key performance indicators for the highways asset that measures actual performance at regular intervals. Monitoring the performance and reporting on progress allows assessments to be made demonstrating continuous improvement. This performance management framework will form a key element of our asset management framework implementation and has been developed to incorporate national guidance and our own Corporate Objectives.

### National Guidance:

### DfT Self-assessment

This strategy is developed in line with the DfT self-assessment for incentive funding and in particular question 3:

Does your local authority have a performance management framework and maintenance regime that supports its highway infrastructure asset management strategy and continuous improvement?

### Well Managed Highway Infrastructure Code of Practice:

This strategy is developed in line with Recommendations 26 and 27 of the COP. These recommendations and a brief explanation is provided below:

• Recommendation 26 states that a performance management framework should be developed that is clear and accessible to stakeholders as appropriate and supports the asset management strategy.

• Recommendation 27 states that the performance of the asset management framework should be monitored and reported. It should be reviewed regularly by senior decision makers and when appropriate, improvement actions should be taken.

**Corporate Performance Indicators**

Using our Corporate Priorities as a lead we are able to establish and define what level of service we need from assets taking into consideration customer expectations.

**Corporate priorities:**

P1 – Supporting young people and raising aspirations

P2 – Safeguarding and supporting the most vulnerable people

P3 – Reducing health inequalities and improving health outcomes

P4 – Connected communities

P5 – Safe and clean environment

P6 – Strong, growing economy to enable social mobility

P7 – Supporting our town centres and businesses

P8 – Transparent and effective organisation

We recognise the importance of maintaining our strategic routes (these roads are published as our resilient network and are mapped on the Council's corporate GIS system) to avoid a negative impact on Blackburn and Darwen's economy. To return these strategic roads to a better than the national average condition we prioritise investment to these locations and the authority committed additional capital investment of £10m between 2013/2014 and 2016/2017 with revenue funding now targeted to maintain this level of service. As the Highway Authority we have a duty under the Highways Act 1980 to maintain our roads and the Council has developed and implemented a detailed Code of Practice for Highway Inspection and Maintenance which discharges this duty. This information is available on the Council web site.

**Highways Service Performance Indicators:**

Monitoring of performance is important in assessing both the effectiveness of the HAMP and in identifying emerging issues. Performance information underpins decisions on the balance of resource allocation. It also assists with programme development and provides important information for internal and external assessment purposes.

Blackburn and Darwen's Performance indicators cover the following areas:

- Asset condition
- Planned maintenance and network enhancement
- Inspection and repair
- Network management and movement

The Highways Service Key Performance indicators are summarised below in **table 12**:

| KPI ref. | Definition | Corporate Objective | Annual Target | Reporting Period |
|---|---|---|---|---|
| **Asset Condition** | | | | |
| Percentage of carriageway where maintenance should be considered. | | | | |
| H1 | Principal Roads | P4/P6 | <5% | Annually |
| H2 | Unclassified Roads | P4/P6 | <11% | Annually |
| Footways | | | | |
| H3 | Reduce trip hazards | P4/P6 | <5% | Annually |
| Bridge / Structures | | | | |
| H4 | Maintain $BCI_{AV}$ value of 83 | P4/P6 | +0-2% | Annually |
| **Planned Maintenance and network enhancement** | | | | |
| H5 | Percentage of strategic network where maintenance should be considered. | P6/P7 | <3% | Annually |
| **Inspection and Repair** | | | | |
| H6 | Number of 4-hour repair/make safe following inspection of dangerous defects on the highways | P5 | 98% | Quarterly |
| H7 | Inspections of all adopted roads within the inspection frequency | P5 | 98% | Quarterly |
| H8 | Highway reactive defects completed with allocated timeframes | P5 | 90% | Monthly |
| H9 | Compliance with the highway maintenance gully cleaning strategy | P5 | 100% | Annually |
| **Network management and movement** | | | | |
| H10 | Process all network permit applications within DfT timescales | P4/P6 | 100% | Monthly |
| H11 | Public Rights of Way BVPI, % public rights of way accessible, enabling free health and wellbeing activities | P3 | 67% | Monthly |

## Monitoring and reporting of performance

Annual performance information is collated and published on the web as part of the annual monitoring report. The information along with quarterly and monthly performance information report is also presented at Executive Member briefings. The Council's performance management framework supports the asset management strategy by having a systematic approach to measuring performance.

# Part 6 Risk Management

## 6.0 Risk Management Strategy

### Introduction

The management of current and future risks associated with the Borough highway assets is embedded within the approach to asset management. Strategic, tactical and operational risks are included as should appropriate mitigation measures.

Blackburn with Darwen Borough Council as highway authority is required to manage a variety of risks at all levels within the organisation. A thorough understanding of the likelihood and consequences of the risks supports asset management and key decisions.relating to performance, investment and implementation of works programmes.

Risks are defined as uncertain events, which should they occur will have an effect on the desired performance of an asset or series of assets. It consists of a combination of the likelihood of a perceived threat or opportunity occurring and the magnitude of its impact on the objectives where:

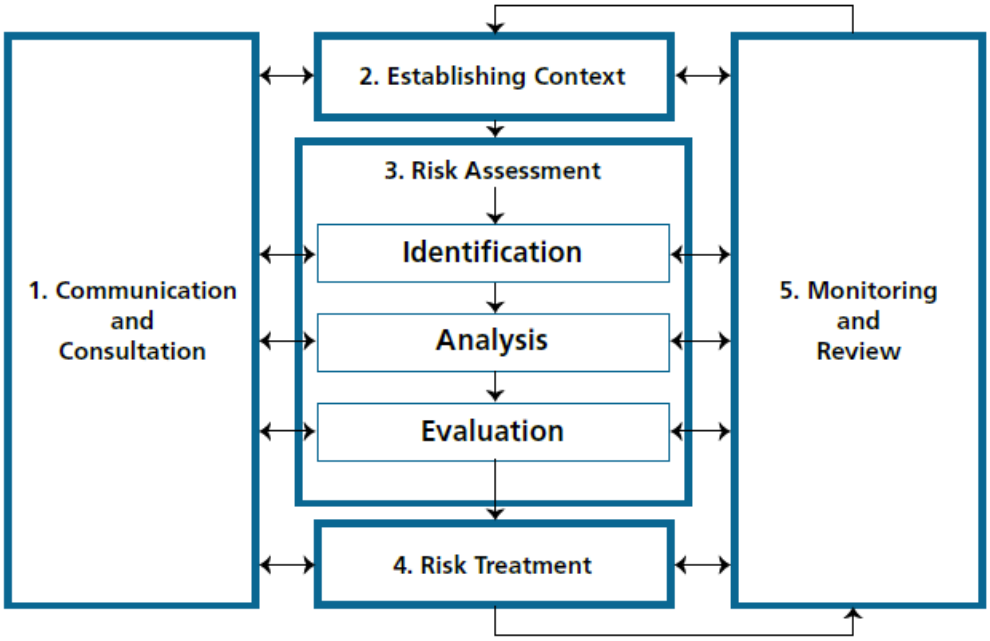
- **Threat** is used to described an uncertain event that could have a negative impact on the levels of service; and
- **Opportunity** is used to describe an uncertain event that could have a favourable impact on the levels of service.

The most commonly understood risks affecting the highway service relate to safety. However, there are a wide range of other risks and their identification and evaluation is a crucial part of the asset management process. Risks may include:

  - Safety;
  - Reputation;
  - Asset loss or damage;
  - Service reduction or failure;
  - Operational;
  - Environmental;
  - Financial; and
  - Contractual.

Understanding and management of risk is fundamental to effective asset management. The Council's approach to the management of risk is shown in the risk

management process below. ISO 31000: 2018 Risk Management Principles and Guidelines sets out the principles of risk management and the organisational framework and process required to develop and implement a risk based approach. The risk based process described within ISO 31000 is illustrated below.




### 6.1 Approach to risk management

In Blackburn with Darwen we intend to apply the concept of ISO: 31000 to the management of the strategic, tactical and operational risks that impact highway asset management.

Risk is managed at several levels using a consistent risk framework that enables the comparison of risks across all services. This may include risks seen as:

- **Corporate** – High level risks that effect the whole authority. Such risks include corporate reputation, civil defence, emergencies; business continuity, health and safety, political and legal and financial risk. Risk policy and management of these risks is usually undertaken by the senior decision makers.
- **Strategic & Tactical** – Risks affecting the management of the highways infrastructure should be considered throughout at both strategic and tactical levels. This Section focuses on these risks; and
- **Operational** – Risk should also be managed when undertaking operational activities.

Comprehensive reference is made to:

- Well Managed Highway Liability Risk, published by the Institute of Highway Engineers and
- Well managed Highway Infrastructure, published by UK Roads Liaison Group

### 6.2 Communications and Consultation

Communication and consultation is vital to establishing a risk based approach to highway liability, therefore it is necessary to engage with a wide variety of stakeholders, all of whom will have an interest or contribution to make.

These include:

- General public;
- Elected members;
- Senior executives of our Council;
- Insurance and risk management colleagues and insurance provider;
- Legal services providers;
- Neighbouring and similar authorities.

It is the Council's intention to consult with these stakeholders when developing the risk based approach to managing the infrastructure assets. Public consultation will be undertaken via the Council's website through which feedback will be invited.

### 6.3 Identifying Critical Assets

The identification of critical assets is essential for supporting the social and business needs of Blackburn with Darwen Borough Council. Critical assets will be identified separately and assessed in greater detail as part of the identification of the resilient network.

Criticality can be assessed by applying broad assumptions about the implications of failure. For example closing a major structure would have a significant impact on the local or possibly the national economy or assuming that higher trafficked roads have a larger consequence of failure than lower trafficked roads. By adopting this approach, simple criteria can be defined to assess the loss of service. For example, loss of use of a road will;

- Affect or disconnect specific parts of a community;
- Affect businesses of different sizes and significance; and
- Affect specific numbers of road users/hour.

### 6.4 Evaluating the risks

Risk assessment involves determining the likelihood and consequence of an event. The risk assessment will allow us to analyse the risks in a systematic manner to highlight which are the most severe and which are unacceptably high and require further mitigation.

We describe the overall risk as **Risk = Likelihood x Consequence**

### 6.5 Likelihood

Likelihood is the chance of an event happening, for example, a failure (asset as well as organisational) or service reduction. It can be measured objectively, subjectively, qualitatively or quantitatively. It can be described using general or mathematical terms such as frequency or probability. Issues to be considered include:

- Changes in policy and funding;
- Current and historic performance (severity and extent) of the asset;
- Severity of the environment, rate of deterioration and/or current age of the asset;
- Asset type, material type, mode of failure, extent of failure, etc;
- Exposure to incidents of all types;
- Human behaviour and workmanship;
- Vulnerability to climate change; and
- Quality of asset management approach and systems.

The likelihood of physical failure of an asset is related to the current condition of the asset, hence the importance of realistic and accurate condition assessment. The likelihood of natural and external events is determined less easily but scientific studies are usually available. The likelihood of other events, such as poor work practices or planning issues can be difficult to ascertain.

### 6.6 Consequence

Consequence is the outcome of an event, such as increased journey times, isolation of local communities or a drop in public perception of the service provided. It can have positive or negative effects and can be expressed qualitatively or quantitatively. The

consequences associated with an event leading to failure or service reduction may include:

- **Safety** – including fatalities and personal injuries;
- **Functionality** – impact of a loss or reduction in service at route, asset or component level, such as weight restrictions on a bridge;
- **Cost** – increased costs due to bringing forward or delaying work, repair costs, fines or litigation costs and loss of income or income potential;
- **Sustainability** – any impact on future use of highway infrastructure assets.
- **Environment** – environmental impacts, such as pollution caused through traffic delay or contamination from spillages, the sensitivity of the route/area, etc;
- **Reputation** – public confidence in organisational integrity; and
- **Community costs** – damage to property.

The table below illustrates the qualitative matrix approach which will be considered when evaluating risks in Blackburn with Darwen Borough Council.

| Impact | Likelihood | | | | |
|---|---|---|---|---|---|
| | Very Unlikely | Unlikely | Possible | Likely | Almost Certain |
| Catastrophic | 5 | 10 | 15 | 20 | 25 |
| Major | 4 | 8 | 12 | 16 | 20 |
| Moderate | 3 | 6 | 9 | 12 | 15 |
| Minor | 2 | 4 | 6 | 8 | 10 |
| Negligible | 1 | 2 | 3 | 4 | 5 |
| | | | | | |
| Key: | | Low Risk – Treatment is not essential as risk can be retained | | | |
| | | Medium Risk – Treatment should be applied as soon as reasonably practical | | | |
| | | High Risk- Treatment should be applied immediately | | | |

## 6.7 Managing the risks

The issuing of the revised Code of Practice, Well-managed Highways in October 2016, dictates that all highway authorities should adopt a risk management approach to managing their highway infrastructure assets.

Risks and their management are documented in the ‘Highway Management Plan’

6.8
The Council consulted with it’s insurers to review the Council’s implementation of the new Code of Practice. The executive member has been briefed on their report which is available as appendix 8 together with an action plan which details how the council will address the issues raised.

## Part 7 Benchmarking

The authority considers benchmarking to be;

*'A systematic process of collecting information and data to enable comparisons with the aim of improving performance, both absolutely and relatively to others. It provides a structure to search for better practice in similar authorities that can then be integrated into an asset management approach'.*

The Council uses benchmarking to validate its commitment to continuous improvement and achieving best value in the delivery of our successful stewardship of the highway infrastructure assets.

To measure benchmarking the Authority has subscribed to the NHT Survey and the CQC Efficiency Network. One of the most important features of the NHT survey is the potential it provides for the Council to compare levels of public satisfaction with other authorities. This comparison enables the review of current levels of service and, if necessary, revise and improve service levels.

The CQC Network collects finance data from members annually, this includes direct and indirect operational and capital expenditure. The expenditure data is combined with quality data, based on road condition statistics gathered from public sources and customer satisfaction data, taken from the NHT Public Satisfaction Survey. The analysis also uses data on the size and composition of each authority's road network, the amount of traffic running on its network and the local change in input prices, both materials and wages.

Member authorities receive annual reports showing how their results compare with the rest of the membership on an anonymous basis. Membership is subject to a mutual non-disclosure and confidentiality agreement which protects the interests of all parties and preserves anonymity of the results.

This council has procured the CQC survey for 2017, 2018 and 2019.

# Part 8 Annual Report

## 8.1 Introduction

In order to provide regular information about the highway and infrastructure our HAMP contained a commitment to provide an annual information report to the Executive Member.

Within the annual information report it is intended to provide updates which ensure the HAMP remains a live and current document. It is proposed that these updates will provide a summary of external pressures and changes within the highway sector. The following list is intended as guidance relating to the content and may be subject to change to reflect our current position at the time of preparing the report.

## 8.2 Content of the Report

- Changes ahead, a Pro-active Approach
- A report on banding awarded following the completion of the annual highway self-assessment questionnaire
- Any funding changes
- Current value of the highway asset
- Investment in the highway infrastructure
- Current maintenance priorities
- Summary of work undertaken during the last 12 months
- Current condition of carriageways, footways and bridges / structures
- Highway maintenance backlog
- Customer engagement activities
- Our performance

# Appendix 1 Service Standards

| Service standard | Description of Service Standard | | |
|---|---|---|---|
| | Late Life | Mid Life | Early Life |
| Definition | The minimum level of service to meet most statutory requirements and compliance with minimum requirements detailed in national codes of practice. The risks and consequences associated with providing this service level are summarised below. | A level of service that generally meets statutory needs and the requirements detailed in national codes of practice. The risks and consequences associated with providing this service level are summarised below: | A level of service that is well above statutory needs and the requirements detailed in national codes of practice. Service delivery aimed at maintaining the asset to a high standard. The risks and consequences associated with providing this service level are summarised below: |
| Legal | The authority complies with the requirements of the relevant codes of practice in all key respects; any derogation is documented and supported by a robust risk assessment;<br><br>We know what is required and how we deliver the requirements. | The authority complies with the requirements of the relevant codes of practice in all respects and a robust risk assessment exists, except where it chooses not to carry one out. In all such instances any derogation is documented and supported by a robust risk assessment;<br><br>We know what is required and how we deliver the requirements;<br><br>The legal exposure of the authority is reasonably controlled and robust systems are in place to provide supporting evidence of compliance with the code of practice. | The authority complies with the requirements of the relevant codes of practice in all respects; any minor local derogations are documented and supported by a robust risk assessment;<br><br>We know what is required and how we deliver the requirements;<br><br>We further understand future needs and pressures and have a well-developed strategic plan for the next five years. |
| Safety | High reliance on Safety Inspection regime to identify defects;<br><br>It is likely to result in an increase in the risks associated with safety or legal deficits; | Safety defects are well defined with performance standards for rectification of those defects;<br><br>Systems are in place to ensure proper assessment prioritisation and rectification | Significant reduction in claims against LCC for personal injury and third party damage;<br><br>Safety defects are well defined with performance |

| | | | |
|---|---|---|---|
| | Safety defects are well defined with performance standards for rectification of those defects. Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible;<br><br>We have relevant information to support our delivery to required performance standards. | of defects or temporary arrangements to mitigate risk until a permanent repair is possible;<br><br>We have relevant information to support our delivery to required performance standards. We are proactive in the identification and rectification of those defects;<br><br>It is likely to result in an increase in the risks associated with safety or legal deficits. | standards for rectification of those defects;<br><br>Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible;<br><br>We have relevant information to support our delivery to required performance standards;<br><br>Performance standards are challenging and reviewed regularly. |
| Availability | The majority of the asset is available for normal reasonable use. | The majority of the asset is available for normal reasonable use;<br><br>Restrictions of the asset are largely planned maintenance activities rather than emergency repairs with the exception of emergency utility repairs. | The asset is available for normal reasonable use. |
| Condition | The condition of the asset is deteriorating at an accelerating rate compared with the mid-life stage;<br><br>It is assumed that the rate of deterioration exceeds 10%. | The condition of the asset is stabilised or with minor deterioration;<br><br>It is assumed that the rate of deterioration is under 10%. | The condition of the asset is improving strongly with asset value increasing;<br><br>It is increasingly possible to flexibly assign resources to selected programmes each year as the relative deterioration is marginal year on year. |
| Asset Value | The asset value is depreciating rapidly as a result of minimum investment. | The asset value is likely to be depreciating as a result of other external factors rather than under investment. | The investment required to bring the asset to an as new condition is reducing;<br><br>High costs in the short term as intervention measures are used to improve asset condition – results in lowest whole life costs. |

| | | | |
|---|---|---|---|
| | | | |
| Public Perception | Likely to be well aware that the asset is deteriorating and is becoming less available, safe or fit for purpose;<br><br>Members in particular will be facing pressure for improvement and will seek to react to local pressures potentially diluting the impact on overall asset condition;<br><br>Complaints and claims would be expected to be high. | It is likely that public opinion does not reflect the condition of the asset and the presence of any defects at all would be considered by members of the public to indicate that the asset was in poor condition. | Generally public perception of the condition of the strategic and residential road network would be expected to be positive however the response to the few defects remaining will be disproportionate as expectations will steadily increase;<br><br>The majority of the asset improvements will be less visible and the general public and members would not be expected to notice improved drainage, improving lighting column condition or improving bridge condition. |
| Service Delivery | The principle focus is likely to be reactive maintenance rather than preventative works undertaken at the optimal time;<br><br>It will not be possible to address all issues rapidly and a prioritisation of service demands will be required;<br><br>An increasing backlog of maintenance needs will exacerbate the service problems and lead to a further chain reaction of deterioration;<br><br>Depreciation in the asset value would be expected to exceed the investment required to achieve a mid-life standard; | A mixture of preventative maintenance undertaken at the optimal time and reactive maintenance will be delivered although it is possible that outside pressure focuses some investment in areas which do not serve to improve the condition of the asset;<br><br>The backlog of maintenance needs will probably be growing but at a reduced rate, due to any severe weather events and the reduction of our ability to focus on technically driven programmes. | The principle service delivery is focused on preventative maintenance at the optimal time in an assets life cycle which will effectively reduce the average cost per scheme, particularly in respect of roads, and in turn fuel more rapidly improving condition;<br><br>Operating at a sustainable level using sustainable methods. |

Appendix 2 NHT Informal Briefing Paper

**EXECUTIVE MEMBER**
**INFORMAL BRIEFING PAPER**

| | |
|---|---|
| **REPORT OF:** | Executive Member for Regeneration |
| **LEAD OFFICER:** | Director of Growth and Development |
| **DATE:** | 7th June 2017 |

| | |
|---|---|
| **PORTFOLIO/S AFFECTED:** | Regeneration |
| **WARD/S AFFECTED:** | All |

**SUBJECT: National Highways and Transport (NHT) 2017 Network Public Satisfaction Survey**

**1. PURPOSE**

To inform the Executive Member of the upcoming NHT Network Public Satisfaction Survey. To brief the Executive Member of Regeneration on the results of the 2015 survey undertaken when highways were the responsibility of the Executive Member for the Environment.

**2. RECOMMENDATIONS**

The Executive Member NOTES the following:
That an Expression of Interest has been submitted by the council to take part in the NHT 2017 Network Public Satisfaction Survey.
The results of and actions taken following the 2015 survey

**3. BACKGROUND**

Prior to 2015 the council relied on Best Value Performance Indicators (BVPI's) and ad hoc customer surveys of public opinion to inform it's Highway Maintenance function. In 2015 the decision was made to participate in the NHT Network Public Satisfaction Survey. As explained on their website:

> *The NHT Public Satisfaction Survey collects public perspectives on, and satisfaction with, Highway and Transport Services in Local Authority areas.*

*It is a unique, standardised, collaboration between Highway Authorities across the UK enabling comparison, knowledge sharing, and the potential to improve efficiencies by the sharing of good practice. The NHT Survey is also referenced in the DfT's Incentive Fund Self-assessment process.*

*It gives participating Authorities:*

- *A better understanding of how they are performing in the eyes of their public*
- *A consistent datum for setting service levels and a means of measuring the impact of service improvements*
- *Access to the best performers and the opportunity to learn from the good practice of others*
- *Full transparency of data for benchmarking purposes*

The summary results for Blackburn with Darwen of the 2015 survey were as follows:

| Satisfaction | National Results (%age) | | | BwD Result |
|---|---|---|---|---|
| | Low | Average | High | |
| | | | | |
| Overall | 50 | 55 | 60 | 52 |
| | | | | |
| By Theme: | | | | |
| Accessibility | 65 | 74 | 79 | 65 |
| Public Transport | 48 | 60 | 73 | 55 |
| Walking/Cycling | 51 | 56 | 62 | 53 |
| Tackling Congestion | 44 | 51 | 58 | 44 |
| Road Safety | 52 | 56 | 62 | 54 |
| Highway Maintenance | 44 | 52 | 60 | 49 |

There were 545 respondents to the survey questionnaire of which 219 were 'Wholly retired from work'. Guidance issued with the DfT Self Assessment suggests gathering a minimum of 800 to 1000

These results show a serious level of dissatisfaction of the public with the highway network. Particularly poor results were recorded in the Accessibility and Tackling Congestion themes. In this respect it should be noted during this survey period, the council were in the midst of delivering five major capital projects which impacted on the running of the highway network; Pennine Reach, Freckleton Street Link Road, Cathedral Quarter, Junction 5 'Pinch Point' scheme and Network Recovery Resurfacing Programme.

These projects, and associated works, caused major disruption to several of the main traffic corridors in the borough and to public transport provision with an interim 'sub-standard' bus

station being provided following the closure of the existing bus station for redevelopment whilst the new bus station was being constructed.

Whilst there were obvious lessons to be learnt when the detailed survey results were analysed, it was felt that, the sheer magnitude of the works on the highway network, which saw the largest capital investment in it for decades, had a great effect on the dissatisfaction rating.

As all of these schemes extended into 2016, the decision was made not to participate in the 2016 survey but to wait until the major network schemes were completed and 'settled in' before re-joining the NHT survey in 2017.

**4. KEY ISSUES**

With regard to this year's NHT survey, now that the major schemes have been completed on site it is important that the authority move toward annual surveys to more fully inform policy decisions going forward.

Even though it is believed that much of the 2015 survey results were heavily influenced by the sheer magnitude of works on the network, action has been taken on several of the issues raised.

For example, in response to the question 'For which of the following service areas is it not acceptable to reduce the level of service?' the top three service areas were:

- Management/maintenance of roads
- Gritting roads and pavements/clearance of snow
- Management/maintenance road drainage/gullies/drains

As stated above, one of the major capital projects being delivered was the Network Recovery Resurfacing Programme, set up to arrest the decline in the standard of the road network maintenance. This 4 year programme comes to a finish this year.

The winter maintenance policy and winter maintenance operational plan have been reviewed in order to ensure that the council are prepared to keep the maximum network possible within existing resources accessible during general winter conditions. A resilience strategy has also been developed in order to maintain a resilient network which will keep the borough working during extreme severe weather occurrences.

With regard to the third point relating to the maintenance of the highway drainage network, a gully maintenance policy has been developed in order to move from a reactive cleaning approach towards a planned maintenance approach. This includes a gully cleaning schedule which is set up in a ward to ward basis and has the 'buy-in' of all the local ward councillors, many of whom are active during the cleaning on their wards, helping with resident liaison, keeping gullies clear from parked cars, etc.

These are only a few of the actions taken as a result of the 2015 survey.

**5. POLICY IMPLICATIONS**

The survey results will inform any review and updating of existing policies each of which will be taken through the Council's approval procedure.

**6. FINANCIAL IMPLICATIONS**

Customer Satisfaction surveys and customer feedback on the highway maintenance service are key elements of the DfT Incentive Funding Self-Assessment and the NHT Network Public Satisfaction Survey is a DfT recognised national standard for collecting much of this information.

Failure to carry out the survey could reduce the council's self-assessment grade which would impact negatively on future DfT Incentive Funding.

The cost of the 2015 survey was £11.67k (inc VAT) and it is anticipated that the 2017 survey will be a similar cost. The actual cost will depend on the different options chosen once the order form is received. This will be funded through the existing highway budgets.

**7. LEGAL IMPLICATIONS**

None

**8. RESOURCE IMPLICATIONS**

None

**9. EQUALITY AND HEALTH IMPLICATIONS**

**Please select one of the options below. Where appropriate please include the hyperlink to the EIA.**

Option 1 ☒ Equality Impact Assessment (EIA) not required – the EIA checklist has been completed.

Option 2 ☐ In determining this matter the Executive Member needs to consider the EIA associated with this item in advance of making the decision. *(insert EIA link here)*

Option 3 ☐ In determining this matter the Executive Board Members need to consider the EIA associated with this item in advance of making the decision. *(insert EIA attachment)*

**10. CONSULTATIONS**

**11. STATEMENT OF COMPLIANCE**

The recommendations are made further to advice from the Monitoring Officer and the Section 151 Officer has confirmed that they do not incur unlawful expenditure. They are also compliant with equality legislation and an equality analysis and impact assessment has been

| |
|---|
| considered. The recommendations reflect the core principles of good governance set out in the Council's Code of Corporate Governance. |

| | |
|---|---|
| **VERSION:** | **1** |

| | |
|---|---|
| **CONTACT OFFICER:** | George Bell / Matthew Joyce |
| **DATE:** | 30th January 2017 |
| **BACKGROUND PAPER:** | NHT Survey Report 2015:<br>• Summary Report for Blackburn with Darwen<br>• Question by Question Results for Blackburn with Darwen |

## Appendix 3. Highways Statutory Legislation.

Defining Responsibilities, Duties and Powers.

1. The Weeds Act 1959.
2. Highways Act 1980.
3. Wildlife and Countryside Act 1981, mainly PROW.
4. Road Traffic Regulation Act 1984.
5. The Environmental Protection Act 1990.
6. New Roads and Street Works Act 1991.
7. Road Traffic Act 1991.
8. Land Drainage Act 1991.
9. The Local Authorities (Transport Charges) Regulations 1998.
10. The Local Government Act 1999.
11. The Transport Act 2000.
12. Countryside and Rights of Way Act 2000.
13. Traffic Signs Regulations and General Directions 2002.
14. The Railways and Transport Safety Act 2003.
15. Traffic Management Act 2004.
16. Public Health Act 1936.
17. Public Health Act 1961.
18. Town and Country Planning Act 1990.
19. The Landfill (England and Wales) Regulations 2002.
20. The Waste Electrical and Electronic Equipment Regulations 2006 & 2009.
21. The Flood and Water Management Act 2010.
22. Building Regulations 2010.
23. Civil Contingencies Act 2004.
24. Local Government (Miscellaneous Provisions) Act 1976.
25. Town Police Clauses Act 1847.
26. Road Traffic (Special Events) Act 1994.
27. The Health and Safety at Work Act 1974.
28. Management of Health and Safety at Work Regulations 1992.
29. Construction (Design and Management) Regulations 1994.
30. The Equality Act 2010.

31. Data Protection Act 1998.
32. The Management of Health and Safety at Work Regulations 1999.
33. Freedom of Information Act 2000.
34. Control of Substances Hazardous to Health Regulations 2002.
35. The Localism Act 2011
36. Clean neighbourhoods and Environment Act 2005
37. The Human Rights Act 1988.
38. The Criminal Justice and Public Order Act 1994
39. The Health and Social Care Act 2012.

## Appendix 4. Unadopted Roads.

Corporation Park Ward.

Albany Road, off Revidge Road.

Beardwood with Lammack Ward.

Beardwood Drive, off Preston New Road.

Carr Lane (part of), off Meins Road.

Fecitt Road, off Revidge Road.

Lowood Place, off Revidge Road.

Merlin Road, off Revidge Road.

Mollington Road, off Revidge Road.

Ravenswing Avenue, off Revidge Road.

Scar Lane, off Preston New Road.

Whinfield Place, off Preston New Road.

White Road, off Beardwood Brow.

Wycollar Drive, off Preston New Road.

Wycollar Road, off Revidge Road.

Wyfordby Avenue, off Preston New Road.

Wensley Fold Ward.

Selborne Street (part of), off Redlam.

Mill Hill Ward.

Bonsall Street, off Shorrock Lane.

Primrose Terrace, off Hawkins Street.

Speke Street, off Mill Hill Bridge Street.

Shadsworth with Whitebirk Ward.

Ronald Street, off Accrington Road.

Livesey with Pleasington Ward.

Bowden Avenue, off Victoria Road.

Old Hall Lane, off Sandy Lane.

Eugene van as Drive, off Livesey Branch Road, west of canal bridge.

Stockclough Lane, off Horden Rake.

Fernhurst Ward.

Bank Hey View, off Heys Lane.

Farmers Row, off Heys Lane.

Green Row, off Heys Lane.

Tottenham Road, off Sandy Lane.

Woodland Place, off Sandy Lane.

North Turton with Tockholes Ward.

Slipper Lowe Brow (Mill Lane), off Tockholes Road.

Little Harwood Ward.

Cornelian Street (part of), off Jasper Street.

Gretna Road, off Whalley New Road.

Opal Street, off Whalley New Road.

North Turton with Tockholes Ward.

Chapel Street, off High Street, Belmont.

South View, off High Street, Belmont.

Ward Street, off High Street, Belmont.

Ryecroft Lane, off High Street, Belmont.

Edgworth Vale, off Bury Road, Edgworth.

Overshores Road, beyond Entwistle Hall Lane.

Batridge Road (part of), off Greens Arms Road.

Embankment Road, off Greens Arms Road.

Chapel Fields off High Street, Chapeltown.

Station Road, off Chapeltown Road.

Bank Street, off Station Road.

Kay Street, off High Street.

The Sidings, beyond Station Road.

Horrobin Lane, off Chapeltown Road.

The Copse, off Horrobin Lane.

The Spinney, off Horrobin Lane.

Vale Street, off Wellington Road.

Birches Road, off Wellington Road.

Martin Street, off Wellington Street.

Hill Street, off Martin Street.

Back Sandy Bank Road, off Bolton Road.

Howarth Street, off Bolton Road.

Benson Street, off Bolton Road.

Mars Street, off Bolton Road.

May Street, off Bolton Road.

Edgworth Vale, Bury Road.

Spring Vale, off Bury Road.

# Appendix 5 Competency Matrix

Highway Infrastructure Asset Management

Competencies required

Essential ✓

Preferable ✓✓

Desirable ✓✓✓

| | Position | Director | Head of Service | Asset Manager | Operations Manager | Assistant Highways Manager |
|---|---|---|---|---|---|---|
| Qualifications | Degree | ✓ | ✓ | | ✓✓ | |
| | Management Qualification | ✓ | ✓ | ✓✓ | | |
| | Engineering Degree | | | ✓ | | |
| | Second Degree | ✓✓ | ✓✓ | ✓✓ | | |
| | Chartered Engineer | | | ✓ | | |
| | Professional qualification | ✓ | ✓ | ✓ | ✓✓ | |
| | IOSH accreditation | ✓ | ✓ | ✓ | ✓ | ✓ |
| | HMEP e-learning | ✓✓ | ✓ | ✓ | ✓ | ✓ |
| Experience | Extensive Local Government experience | ✓ | ✓ | ✓ | ✓✓ | |
| | Extensive Civil Engineering experience | | ✓✓ | ✓ | ✓ | ✓ |
| | Partnership working | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Project Management | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Budgetary Management | ✓ | ✓ | ✓ | ✓✓ | ✓ |
| | Performance Management | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Procurement | | ✓✓ | ✓ | ✓ | |
| Knowledge | Risk management | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Highway legislation | | | ✓ | ✓ | ✓✓ |
| | DfT strategies | ✓ | ✓ | ✓ | | |
| | Procurement legislation | | ✓✓ | ✓✓ | | |

# Appendix 6 Hierarchy Groups

Carriageway Hierarchy

| Category | BwD Ref | Type of Road General Description | Description |
|---|---|---|---|
| Strategic Route | 1 | Trunk and some Principal 'A' class roads between Primary Destinations | 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. |
| Main Distributor | 2 | Major Urban Network and Inter-Primary Links. Short - medium distance traffic | Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety. |
| Secondary Distributor | 3 | B and C class roads and some unclassified urban routes carrying bus, HGV and local traffic with frontage access and frequent junctions | In residential and other built up areas these roads have 20 or 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. In rural areas these roads link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network. |
| Link Road | 4 | Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions | In urban areas these are residential or industrial interconnecting roads with 20 or 30 mph speed limits, random pedestrian movements and uncontrolled parking. In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic. |
| Local Access Road | 5 | Roads serving limited numbers of properties carrying only access traffic | In rural areas 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. |
| Minor road | 6 | Little used roads serving very limited numbers of properties. | Locally defined roads. |

Footway hierarchy

| Footways Category | BwD Ref | Description |
|---|---|---|
| Prestige Walking Zones | 7 | Very busy areas of towns and cities with high public space and street-scene contribution. |
| Primary Walking Routes | 8 | Busy urban shopping and business areas and main pedestrian routes. |
| Secondary Walking Routes | 9 | Medium usage routes through local areas feeding into primary routes, local shopping centres etc. |
| Link Footways | 10 | Linking local access footways through urban areas and busy rural footways. |
| Local Access Footways | 11 | Footways associated with low usage, short estate roads to the main routes and cul-de-sacs. |
| Minor Footways | 12 | Little used rural footways serving very limited numbers of properties |

## Appendix 7 External Stakeholder Contact Details

| Organisation | Contact details |
|---|---|
| **Utilities** | |
| Gas | |
| Water | |
| Electricity | |
| Telephone | |
| Cable | |
| **Emergency Services** | |
| Police | Greenbank |
| Fire | Byrom Street |
| Ambulance | |
| **Other** | |
| Environment Agency | enquiries@environment-agency.gov.uk |
| Highways England | |
| Residents | |
| Key Workers | |
| Commuters | |
| Hospitals | |
| Schools | |
| Housing associations | |
| Businesses/Employers | |
| **MPs** | |
| Blackburn, Kate Hollern, MP | |
| Darwen and Rossendale, Jake Berry, MP | |
| **Media** | |
| Lancashire Telegraph | |
| Radio Lancashire | |

# Appendix 8 Highways Review

Highways Review

for

Environment and Leisure at Blackburn with Darwen Borough Council

Davyfield Depot
Davyfield Road
Blackburn

BB1 2LX

Date(s) of Visit(s)
25th July 2019

Assignment ID: UL-033604-0001

| **Risk Consultant/Engineer** | | |
|---|---|---|
| Geraldine McFaul | | Risk Consultant |
| 0 | e-mail | 0 |

| **Person(s) seen** | | |
|---|---|---|
| **Name** | **Role** | **Organisation** |
| Martin Eden | Director of Environment and Leisure | |
| Dwayne Lowe | Head of Highways | |
| Matthew Joyce | Asset Manager | |
| Paul Withington | Inspection Manager | |
| George Bell | Senior Consultant | |
| Les Smith | Operations Manager | |
| Natalie Coupe | Principal Insurance Officer | |

## EXECUTIVE SUMMARY

**Scope and Purpose**

The purpose of the Highways Asset Management Grading is to review the risk management arrangements within the highway authority and to report findings to Zurich Municipal Underwriting, to assist with the Underwriting process.
The grading will also benefit the organisation, as it provides the authority with a benchmark against the Zurich Highways Grading Standard, which itself is based on the principles outlined in the 2016 Department for Transport Code of Practice "Well-managed Highway Infrastructure", together with an assessment of the robustness of the evidence and arrangements for prevention of accidents incident and, ultimately, defence of claims.

**Key Findings**

The Officers were all very positively engaged in the Highways Grading process and displayed an excellent awareness of the needs for a risk based approach to meet the New Code of Practice. The Council has developed a suite of Asset Management Plans, Framework and Inspection documentation based upon full risk assessments of each highways roads and footpaths. The Asset Management Framework and Strategy has a highways bias and is linked to the Council's Corporate Vision and Objectives. This Policy is currently under review by the Head of Highways in order to update the terminology and also to ensure a focus upon preventative priorities to reduce condition deterioration. In the event of a claim framed around the new 'Code', I am of the opinion that the Council would be reasonably able to provide a sufficient claims defence. Albeit that the overall timeline and evidence to show the move from the Old Code to the New Code should be collated as noted in this report.

**Overview of Risk Improvement Actions**

Collate a timeline of evidence that shows how the Council have developed the Highways Management Strategy from the previous system to one which meets the New Code. The risk based approach to the inspection and response system should be extended, with relevant and proportionate training, to those footpaths within parks and recreation grounds within the Council remit. A formal Claims Procedure Policy should be developed to reflect the positive arrangements in place between the Insurance and Highways Teams and the Councils Insurers.

## Grading Assessment

| Risk Factor | RIA | As Is | To Be |
|---|---|---|---|
| **Setting the Framework** | | | |
| **Strategic Planning** | 1 | B | B |
| *Can the customer show how they have approached, strategically, the development of their Highways Management Policy to meet the New Code?* | | | |

'As is' statement - A strategy to deliver compliance with the New Code can be described (even if it's not complete) with written evidence of the steps being taken to get to New Code compliance.

Further comment - The Council has a suite of Briefing Notes for each element of the new Highways Asset Management Strategy, Policy and Inspection/Repairs Procedures. Some are still under review before final sign off, however, there is confidence that all relevant information is available, if not fully collated to one central repository.

| | | | |
|---|---|---|---|
| **Framework** | | B | B |
| *Has a documented Asset Management Framework been developed and endorsed by senior decision makers?* | | | |

'As is' statement - A review of every road, footpath and street furniture risk has been carried out. This information is being collated through a risk based approach to develop the Asset Management Framework.

Further comment - The client is reviewing and updating its asset management framework to ensure that the terminology and preventative focus is included in line with the RBA in the Inspection and Repairs Policies.

| | | | |
|---|---|---|---|
| **Policy** | | B | B |
| *Has an asset management policy and strategy been developed and published that aligns with and supports the Corporate Vision?* | | | |

'As is' statement - The Policy and Strategy align with and support the Corporate Objectives and Vision

Further comment - The Council is working to further develop the Strategy to reflect a pro-active highways management plan.

| | | | |
|---|---|---|---|
| **Stakeholder Consultation** | | B | B |
| *What level of stakeholder engagement and communication is in place?* | | | |

'As is' statement - Two-way communication and reports to members and senior officers showing the steps taken to develop the new framework, management plan and code compliance. Some external communication.

Further comment - A weekly meeting and review is held with the Executive Member responsible for Highways. A specialist Highways Briefing is held monthly with an Action Plan developed after each meeting. The Corporate Plan and relevant highways KPI's are reported to the Council twice per year.

| | | | |
|---|---|---|---|
| **Collaboration** | | B | B |
| *How has the Authority engaged and tested consistency in their approach to the New Code with neighbouring or similar authorities?* | | | |

'As is' statement - There is evidence of meeting and consulting with neighbouring authorities to show consistencies have been developed. Part of a local consortium/partnership.

Further comment - Joint working with Blackpool, collaboration and benchmarking with North West Authorities, attendance at ADEPT meetings etc.

| | | | |
|---|---|---|---|
| **Asset Maintenance** | | B | B |
| *Is the highways network viewed as an integrated set of assets which is being managed through the maintenance policies?* | | | |

'As is' statement - Asset management plan includes all highways assets and decision making is linked between functions e.g. lighting, cycle routes etc. Some opportunities are taken to asses and maintain assets as a whole by location or strategic objective.

Further comment -

| | | | |
|---|---|---|---|
| **Finance** | 2 | C | B |
| *To what extent does the organisations financial planning take into account the risk information and outputs of the asset management policy and strategies?* | | | |

'As is' statement - Disconnect between budgets and asset condition/safety

Further comment - The Head of Highways has been in post for 4 weeks. He is currently reviewing the Asset Management Plan and Framework with the intention of developing a direct link between the risk based approach to planned and reactive maintenance and the budgeting for Highways as a whole.

| Risk Factor | RIA | As Is | To Be |
|---|---|---|---|
| **Asset Management System** | | | |
| **Risk Assessment** | | B | B |
| *Has a risk based approach been developed and adopted for all aspects of highways infrastructure management?* | | | |

'As is' statement - Have adopted a risk based approach and updated inspection frequencies and repair responses accordingly.

Further comment -

| | | | |
|---|---|---|---|
| **Document Control** | | B | B |
| *Asset Data Management and Asset Management Systems. How is the information to support a risk based approach to highways maintenance being collated and managed?* | | | |

'As is' statement - Comprehensive electronic records that can be interrogated easily. Data to support the risk based approach is collated and managed in one system including GIS, inspection records, claims information, inventory, priorities, repair response etc. Daily refresh/upload of data.

Further comment -

| | | | |
|---|---|---|---|
| **Asset Register** | 3 | B | B |
| *Is there a network inventory or register of highways assets together with information on their scale, nature and use?* | | | |

'As is' statement - Inventory of all highway assets incorporated into a GIS system. Data audited to ensure quality.

Further comment - Have scored B albeit with recommendations.

| | | |
|---|---|---|
| **Network Hierarchy** | A | B |
| *How is the network hierarchy defined and how was it arrived at?* | | |

'As is' statement - A network hierarchy is defined which includes all elements of the highway network, including carriageways, footways, cycle routes, structures, bridges, lighting and rights of way. The hierarchy takes into account current and future expected use, resilience and local economic and social factors including industry, schools, hospitals and other similar user groups. The information is audited routinely and updated regularly.

Further comment -

| | | |
|---|---|---|
| **Embedded Risk Management** | B | B |
| *How deeply is the risk management process embedded in the strategic and operational management of the highway assets?* | | |

'As is' statement - A risk management approach has been used to develop much of the asset management plan.

Further comment -

| | | |
|---|---|---|
| **Competencies and training** | B | B |
| *Have the levels of competency, experience, training and expertise been defined for all levels of officer that inputs into the management of highways assets, i.e. from Director through to Inspector and Maintenance crew?* | | |

'As is' statement - Accredited training (such as LANTRA, SCQF) supplemented by a supervisory team approach. Feedback and discussion at regular team meetings. Some professionally qualified staff. Refresher training at regular intervals.

Further comment - Formal and informal training has been delivered to front line and management/Directors as appropriate including specific training on the Risk Based Approach for the New Code, Mock Trials etc.

| | | |
|---|---|---|
| **Resilient Network** | B | B |
| *To what degree is the resilience of the network defined and understood?* | | |

'As is' statement - Plan includes contingency arrangements for prolonged periods of severe weather. Minimum priority networks are defined. Annual review of arrangements.

Further comment - The Resilient Network is reviewed every 2 years unless a significant change is identified (the 2 new Link Roads have prompted a current review)

| Risk Factor | RIA | As Is | To Be |
|---|---|---|---|
| **Performance Management** | | B | B |
| *Has a performance management framework been established and what evidence is there of monitoring and performance feedback to all stakeholders, including evidence of formal review and adjustment where necessary?* | | | |

'As is' statement - Performance subject to formal monitoring at set frequencies dependent on risk including safety inspections, accident reviews, risk assessments/method statements adherence, SLA, completion of repairs, use of budgets/funding. Periodic monitoring is recorded and non-compliances discussed where appropriate.

Further comment - Monthly reviews and reports are delivered to the Highways Briefings and to the Risk Management Group. A project is underway to bring all the relevant KPI's together to view on one dashboard which will help develop and improve communication, awareness and improvement opportunities.

| | | | |
|---|---|---|---|
| **Operational Delivery** | | | |
| **Design** | | B | B |
| *When developments, including highway infrastructure capital schemes, are planned is there consultation with the highways function and consideration of whole life/designing for maintenance?* | | | |

'As is' statement - Highways maintenance department consulted at the design and plan stage to input consideration of future maintenance costs. Maintenance budgets are adjusted accordingly.

Further comment -

| | | | |
|---|---|---|---|
| **Inspection** | | A | B |
| *Have inspection frequencies been reviewed on a risk basis, taking into account the asset management plans and network hierarchy etc.?* | | | |

'As is' statement - A risk based inspection regime has been developed using the Network Hierarchy and asset management plans for all highways assets. Links to highways adoption and NRSWA reinstatement.

Further comment -

| | | | |
|---|---|---|---|
| **Condition Surveys** | | B | B |
| *To what extent are condition surveys and other condition reviews factored into the wider asset management processes?* | | | |

'As is' statement - Use of an accredited UKPMS System (Highways, MARCHpms, Confirm, Insight, WDMpms). Service requests, complaints and accident locations also considered. The forward programme plan covers up to 3 year period and is reviewed annually.

Further comment -

| | | | |
|---|---|---|---|
| **Defect Repair** | | B | B |
| *Are the response timetables being achieved and are they subject to review, regular compliance monitoring and feedback?* | | | |

'As is' statement - Compliance being monitored. All criteria response is being met.

Further comment -

| | | | |
|---|---|---|---|
| **Claims Management** | | | |
| **Insurance Officer** | | B | B |
| *Is there a dedicated insurance officer role?* | | | |

'As is' statement - Insurance officer adequately trained and adequate cover available for leave / sickness etc.

Further comment - Principal Insurance Officer with an Insurance Officer in post.

| | | | |
|---|---|---|---|
| **Claims Reporting** | 4 | C | B |
| *Can the highway authority describe the claims management and investigation procedures?* | | | |

'As is' statement - Internal and external timescales formalised. Investigation information to insurer within relevant timescales i.e. 30 days - EL and 40 days – PL. PL insurer details readily available (e.g. website).

Further comment - The Principal Insurance Officer has described a proactive and co-ordinated approach to claims management with good links to the Highways Department and to the Insurers. This process has not been formalised or documented.

| Risk Factor | RIA | As Is | To Be |
|---|---|---|---|
| **Investigation** | | A | B |
| *Are all incidents reported to the highway authority investigated and a claim file established?* | | | |

'As is' statement - Periodic review of incident investigation procedures. Demonstrable increase in claims defended.

Further comment - All public reports of defects and all claims intimated are investigated by the Highways Department with a site visit and review.

| | | | |
|---|---|---|---|
| **Claims Analysis** | 5 | C | B |
| *Does the highway authority analyse the claims data that it receives?* | | | |

'As is' statement - Ad hoc arrangements for claims analysis.

Further comment - There is a good link and working relationship between the Insurance Team and the Highways Department. The Principal Insurance Officer has been in post around 10 months, there is little or no record of claims analysis prior to this appointment.

| **Management of Contracts and Contractors** | | | |
|---|---|---|---|
| **Contracts** | | B | B |
| *Outline the client to contractor relationship, where contractors are used for the functional delivery of either inspection or maintenance, or both.* | | | |

'As is' statement - Specific contract to recognised industry standard (HMEP , NEC3) covering each contracted service; Defined procurement process and QA checklists; Legal review and approval; Specific Liability Statements; Full written description of services; KPI include information on risk; Specific insurance cover for services/liabilities; Agreed retention & transfer of documents/records; Means to review and adapt contract terms; Sub-contract T&Cs

Further comment - All Contractors are selected and monitored through the Council Procurement Team.

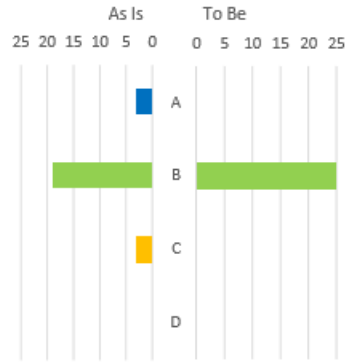
| | | | |
|---|---|---|---|
| **Contractor Management** | | B | B |
| *Outline how contractor performance is monitored and communication channels.* | | | |

'As is' statement - Nominated contacts/liaison; Regular performance monitoring against agreed KPIs; On-site safety & QA monitoring; Defined exchange / retention of data; Induction of contractor workers; Controlled sub-contracting; Regular Review and Improvement

Further comment -

| | | |
|---|---|---|
| Risk Grading Score | 66 | 81 |
| Risk Quality Level | Good | Good |

**Grading Overview**




**Legend**

A Superior / high/ best in class control of the hazard/risk present OR No or very low exposure.

B Adequate control of the hazard/risk present

C Partially adequate control of the hazard/risk present

**Risk Quality Level Scale:**

Low values indicate low risks

| | |
|---|---|
| <51 | Excellent |
| 51-100 | Good |
| 101-150 | Fair |
| >150 | Poor |

**Risk Improvement Actions**

| IA Number | Risk Improvement Action | Priority |
|---|---|---|
| 1 | Collate the written evidence to show the full plan and timeline of each stage of progression from compliance with the Old Code to the New Code. | Advisory |
| 2 | The current asset management review is a positive feature. The risk based information should be used to influence budget allocation for reactive and planned maintenance. An element of flexibility should be established in the budgets to allow for carry over of expenditure at year end. Any reserves could be used to deal with extended periods of extreme weather. | Important |
| 3 | Develop asset inventory to include unlit signage and street lighting. Identify Council responsibilities for footpaths in parks and recreation areas that present potential highways liability risks. Develop a skill share for relevant Recreation Officers to carry out routine inspections of relevant footpaths etc within the Parks - the standards noted in the Highways Policy should apply here. | Advisory |
| 4 | It is recommended that the claims procedure be written and formalised with all relevant parties within the Highways department and the insurers. Ongoing monitor and review of the procedure performance and timescales should be carried out. | Important |
| 5 | A formal and regular claims analysis should be carried out on all highways claims and a report developed to be discussed at the Highways Briefing at least on a quarterly basis. | Important |