Highways Asset Management Strategy: 2017 – 2027.

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: 2017 - 2027
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 2017 to 2027. This strategy seeks to holistically manage all highways assets with available resource.

Document History

Project	BwD Highways Asset Management		
Location	Blackburn with Darwen Borough Council		
Title	BwD Highways Asset Management Strategy		
Document Name			
Date	22 June 2017		
Prepared by	Matthew Joyce	Signature (for file)	
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Authorised by		Signature (for file)	

Quality Management

Rev	Date	Issue / Purpose / Comment	Prepared	Checked	Authorised
0.1	22/06/2017	Draft	Matthew Joyce		
0.2	05/10/2018	Revision	Matthew Joyce		
Final					

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. 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 are informed by input received 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. The Highways Service delivers highway maintenance across the Borough. This service is organised into five 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

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.

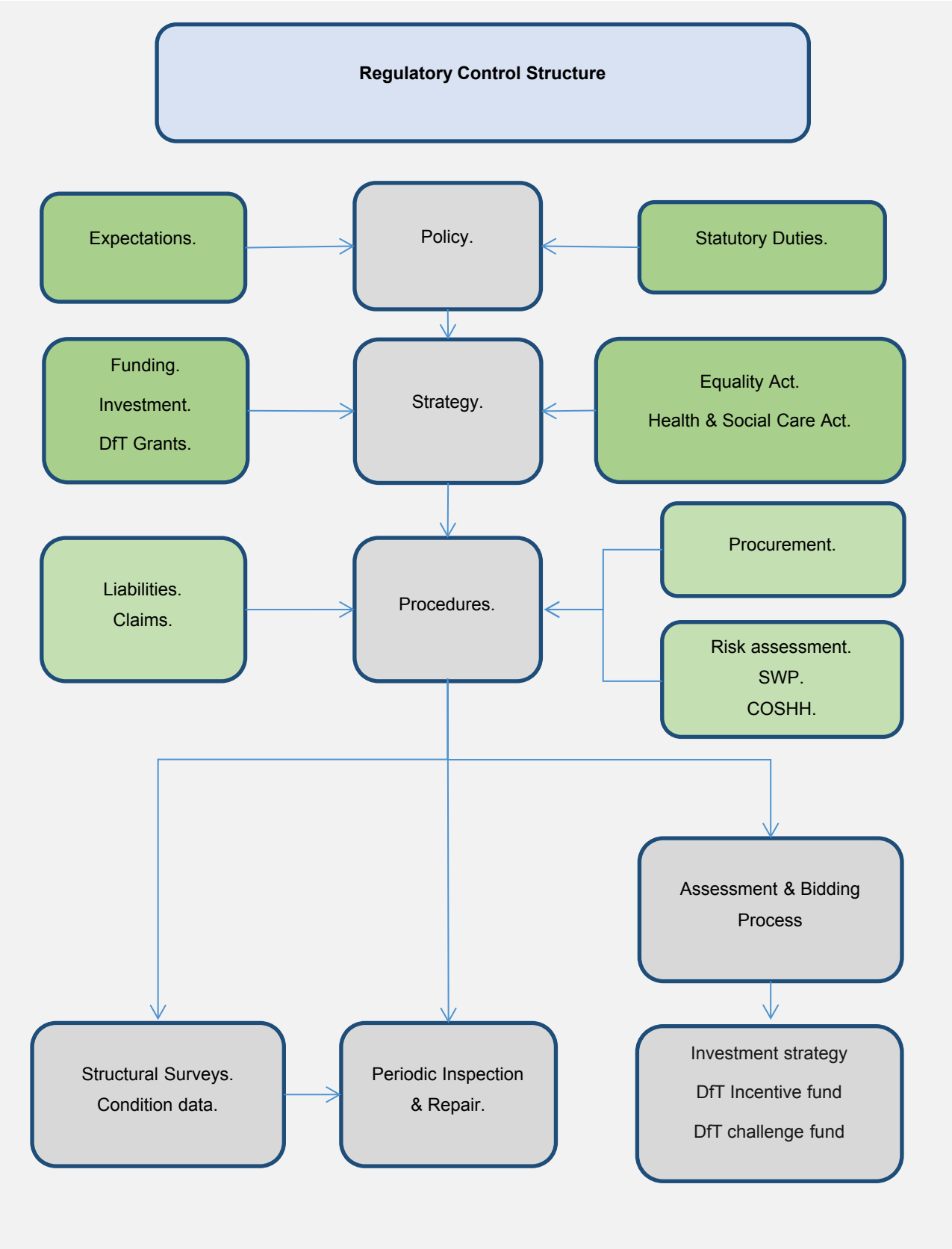
Identify the most cost effective treatment for the asset group and work collaboratively with all stakeholders to embrace innovative new ways of working.

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

Risk assessment and management will be used to inform and support the approach to asset management and inform key decisions regarding performance, investment and implementation of works programmes. 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, fit for purpose robust data will be utilised to ensure accurate life cycle plans are developed to inform 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 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.

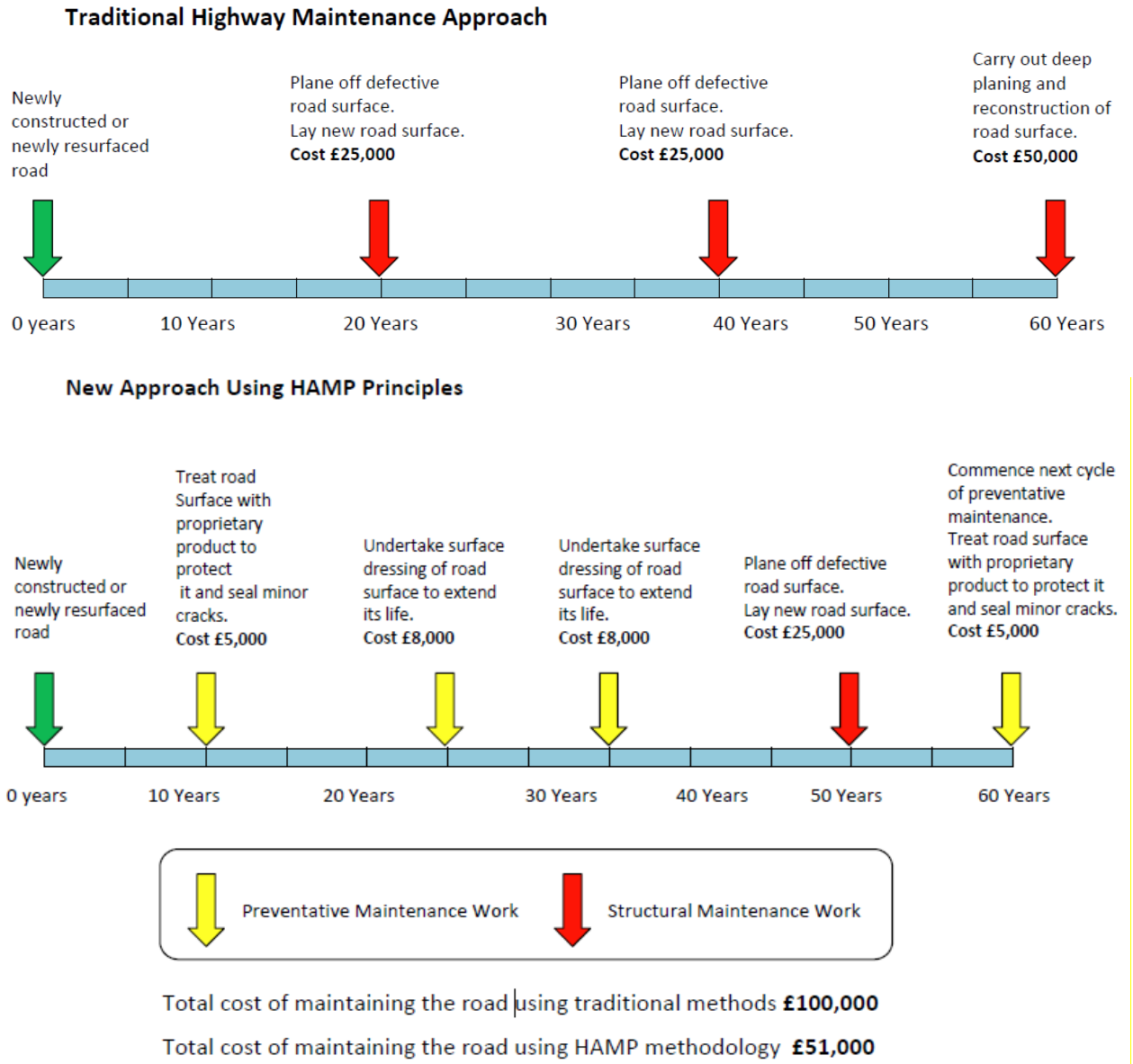
2.2 Lifecycle Planning

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 carry out a risk assessment based approach on assessment of the risks and consequences when defining how highway infrastructure is to be proactively managed. The approach to assessing and managing risks will be via the data collation exercise that underpins the informative approach for inspections of infrastructure assets.

The Council will set 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 risk based approach and guided on 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. Refer to 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 (currently in draft).
- 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 application 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. 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 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 participated in the NHT Public Satisfaction survey 2015 to measure the public's satisfaction with the network and what elements are of greatest importance to them. 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.

The findings of the NHT survey undertaken in 2015 indicated our customers and stakeholders top three priorities are:

- Congestion
- 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. The analysis of the results of these surveys is presented to and discussed with the Executive Member for Regeneration who has overall responsibility for the highway function, see Appendix 2.

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. Ward councillors are notified in advance of proposed work in their wards. 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 via local problem solving.

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 have 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 they contain current best practice 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 highway infrastructure assets maintenance backlog continues to reduce.

2.8 Service standards

Service standards are derived from condition data surveys collected, during the last 12 months, 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 four 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.

As with service standards setting of 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. Throughout the core working hours the routine maintenance is supported by revenue funding, which comprises funds, which is made up from funding 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 often funded based on capital 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			
Highways Incentive Fund	£144,498	£323,247	£323,247	£323,247
Total	£1,338,198	£1,388,947	£1,388,947	£1,388,947

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

Taking into consideration of the fundamental changes being advocated by central government and implemented by the DfT, the Council had been implemented a working draft that was adopted in 2015. 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 then integrate with the wider social and environmental goals 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 cause additional maintenance requirements

When maintenance backlogs reach critical levels due to a protracted lack of resources, the annual rate of deterioration may be greater than the annual programme of affordable works. This causes the backlog to grow year on year.

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 climate of austerity 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 is currently working with our partners to implement the updating of our asset management systems using customised software to interrogate web based data. ExpertAssets is an integrated solution that ensures the best value is derived from the information available on every asset recorded in a practice and service orientated context. It has the ability to capture, management integrate and analyse information in one place. Our system holds extensive amounts of highway related data which enables us to effectively manage our assets, plan future maintenance schemes; to 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 assess themselves 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:-

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,

Tables 4 and 5 provide a summary of the budgets that have been allocated to highway and infrastructure maintenance over the last 5 years

Table 4 Highway Maintenance

Budget £000s	**Description of Work**	**2012/13**	**2013/14**	**2014/15**	**2015/16**	**2016/17**
Revenue	Day to day highway repairs (e.g. potholes), patching programme, small planned road and footpath improvement schemes, drainage repairs	£526	£504	£513	£620	£567
Local Transport Plan Capital	Annual resurfacing programme, annual surface dressing and micro-asphalting programmes	£1,000	£548	£548	£548	£548
Council Capital	Additional Council Capital investment in highway maintenance		£2,012	£2,211	£2,699	£3,283
Other Capital	Additional DfT budget – National Pothole Fund	-	-	£283	-	£85
Other Capital	Additional DfT budget – Severe Weather Recovery Fund	-	-	£172	-	-
	TOTAL	**£1,526**	**£3,064**	**£3,727**	**£3,867**	**£4,483**

Table 5 Bridges and Infrastructure Maintenance

Budget £000s	**Description of Work**	2012/13	2013/14	**2014/15**	**2015/16**	**2016/17**
Revenue	Day to day bridge repairs, emergency work, graffiti bus partnership, minor planned schemes	£65	£66	£66	£67	£38
Local Transport Plan Capital	Major structural schemes (e.g. bridge replacement / refurbishment)	£901	£902	£818	£980	£695
	TOTAL	**£966**	**£968**	**£884**	**£1,047**	**£733**

2.15 Investment in the Highway Asset 2017 – 2027

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.

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 continued 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 2017 – 2027 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 6, 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 2017/18 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 2017/18, 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 6 provide a summary of the anticipated budgets that have been allocated to highway and infrastructure maintenance over the forthcoming 5 years

Table 6

Budget	Description of funding source	2017/18	2018/19	2019/20	2020/21	2021/22
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	£518
Council Capital	Additional Council Capital investment in highway maintenance	Not allocated	Not allocated	Not allocated	Not allocated	Not allocated
DfT Capital	Needs based formula	£548	£548	£548	£548	£548
DfT Capital	Incentive funding award (**to be confirmed) (*denotes level 3 funding attained)	£144	£323	£323	£323	£323
Other Capital	Additional DfT budget – National Pothole Fund	£128	£0	£0	£0	£0
	TOTAL	**£1,338**	**£1,389**	**£1,389**	**£1,389**	**£1,389**

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

A conclusion of this HAMP 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 7 details the condition of the carriageway asset over the last decade and the aspirational conditions over the period of this strategy.

Table 7 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%
2020/21	<3%	<5%	<7%	<11%
2024/25	<3%	<6%	<9%	<15%
2026/27	<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 bridge 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 area.

The Council is responsible for 183 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 89 which is in the good condition bracket.

Condition values monitored over time indicate the bridge stock has been gradually improving. (see table below)

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

The number of spans has increased as a result of including bridges from Witton Park, agreement to maintain culverts previously maintained by the drainage department and footbridges owned by other departments.

Footways

Footway use varies widely; town centres, railway and bus stations, 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 promptly, 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	6,900
2004	5,828
2005	8,734
2006	7,494
2007	8,615
2008	7,100
2009	6,321
2010	3,582
2011	4,168
2012	4,108
2013	4,613
2014	3,551
2015	5,155
2016	5,256

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 36,000 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.

Planned maintenance

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 23 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.

Reactive maintenance

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 – Communications Strategy

3.1 Communications strategy

This Communications strategy is one of a suite of documents forming Blackburn with Darwen's Highway's Asset Management Framework. This strategy addresses the activities of the routine asset maintenance of the Borough's highways and is intended to improve the effectiveness of the Council's communication with relevant Stakeholders.

It will also allow the service area to budget, plan and focus service delivery based upon feedback from our key Stakeholders, as well as ensure we are communicating and engaging more effectively. It will also ensure a focus on activities that have been developed to achieve Blackburn with Darwen's objectives and provide a solid foundation to support consideration for additional funding in future.

Currently communication relevant to highway work and asset management is carried out in an ad-hoc manner on a reactive basis. However, there is clear recognition of the benefits to a more proactive approach in this service area.

This strategy provides the blueprint for the move away from reactive communications, to a more proactive approach, which aims to better take into account the views of Stakeholders across the Borough to ensure we have a more comprehensive and inclusive approach to communications and service delivery.

It incorporates the principles described and detailed in the Government Communication Service's "Writing a Communication Strategy" (https://gcn.civilservice.gov.uk/guidance/writing-a-communication-strategy/ and https://gcn.civilservice.gov.uk/wp-content/uploads/2014/04/Writing-a-communication-strategy-GCS-Guide.pdf) . As a strategy it addresses the 'what', 'why' and 'who' of communications, additional documents add detailed specifics of 'when', 'because' and 'how'.

3.2 How we communicate

Effective communication is prerequisite to the success. Communication should be based on the following principles:

All communications should be clear, non-technical, open, and effective and encourage two-way dialogue.
The tone of all communications should be consistent, honest, positive and accurate.
All communications should have inherent flexibility, to enable development of all plans and messages.
Have a clear and consistent identity for all communications, to which people can relate and which will reinforce key messages.
Applying lessons learnt from current best practice and making efficient use of national campaign material to support the Council's messages, placing them in a national context.

All communications should be delivered on time and at minimum cost budget.
Use green techniques and methods for communication and publicity as far as possible and maintaining value for money.
Communications should adhere to a defined approval and sign off protocol, which resolves ambiguity, ensures clarity and permits appropriate flexibility.
Abide by the principles of the Council's Equality Impact Assessment (EIA) process, demonstrating that the Council gives due regard to people with protected characteristics identified under the Equality Act, 2010.
Abide by the principles of the Council's Health Impact Assessment tool to demonstrate that the Council carries out the duties defined in the Health and Social Care Act, 2012.
Communications should be targeted, where possible, to ensure that messages reach intended recipients and that they are relevant to recipients and that communication is cost effective. Blanket communications should be used where resources and budgets permit.
To monitor, review and evaluate communications and adjust and amend where necessary.

3.3 Target Audience

The effectiveness of communications will be improved if the composition of the target audience is assessed and understood.

This Borough has a wide variety of residents; variables include age, education, ethnicity, employment status, gender and language. Other relevant factors include the distance and duration of journeys made by residents and visitors. Highway works affect all the Boroughs residents as well as visitors, the effectiveness of communications will be far improved if the composition of the target audience is well understood. The methods of communication are as important as the content and the 'tone of voice'. We have to communicate effectively across not only the full age range and also with a variety of education abilities and ethnic backgrounds.

The statistics below have been sourced from the Office for National Statistics (www.ons.gov.uk/). They describe aspects of the Boroughs population that are pertinent to highway maintenance and inherent in improving effective communication and compare it with the national average.

Age	0 - 20	20 - 40	40 -60	60 - 80	80+
Blackburn with Darwen	28.7%	26.3%	26.1%	15.5%	3.4%
England and Wales	23.7%	26.5%	26.7%	18.3%	4.8%

Education All Qualifications					
	16 - 24	25 - 34	35 - 49	50 - 64	65 +
Blackburn with Darwen	16%	18%	27%	22%	17%
England and Wales	15%	17%	26%	22%	20%

Education. Detailed qualifications						
	Age/Qualification	16 - 24	25 - 34	35 - 49	50 -64	65+
Blackburn with Darwen	None	7%	10%	21%	27%	35%
	Apprentice, Level 1 or 2	25%	18%	30%	18%	9%
	Level 3 or 4 or higher	14%	25%	30%	21%	10%
	All	16%	18%	27%	22%	17%
England and Wales	None	7%	7%	14%	25%	47%
	Apprentice, Level 1 or 2	21%	15%	30%	22%	12%
	Level 3 or 4 or higher	14%	23%	30%	21%	12%
	All	15%	17%	26%	22%	20%

Ethnicity	White[1]	Asian[2]	Black[3]	Mixed/Other[4]
Blackburn with Darwen	69.2	28.2	0.6	2.0
England and Wales	85.9	7.5	3.4	3.2

White: English, Welsh, Scottish, Northern Irish, British, Irish, Gypsy or Irish Traveller; Other.
Asian: Asian British, Indian, Pakistani, Bangladeshi, Chinese; Other.
Black: African, Caribbean, Black British, African; Other.
Mixed: Multiple ethnic group, White and Black Caribbean, White and Black African, White and Asian, other mixed, Arab, any other group.

Employment Ages 16 to 64	Employment Rate %	Unemployment Rate %	Economic Inactivity %	Jobseekers Allowance %
Blackburn with Darwen	64.8	7.8	29.6	2.9
Great Britain	72.7	6.0	22.6	2.2

Gender	Males	Females
Blackburn with Darwen	49.9	50.1
England and Wales	49.2	50.8

Language	All people aged 16 and over in household have English as a main language.	At least one but not all people aged 16 and over in household have English as a main language.	No people aged 16 and over in household but at least one person aged 3 to 15 has English as a main language.	No people in household have English as a main language.
Blackburn with Darwen	84.0	7.5	1.4	7.1
England and Wales	91.2	3.7	0.8	4.3

Distance commuted to work	km
Blackburn with Darwen	12.5
England and Wales	**15.0**

Mode of transport Percent	Car/ motorbike	Public transport	Taxi	Walk / cycle / other	Work from home	Not employed
Blackburn with Darwen	40.1	4.0	1.1	8.1	4.7	42.0
England and Wales	38.8	10.2	0.3	8.5	6.7	35.5

3.4 Stakeholders

Highways are used by all the Boroughs residents and visitors to the Borough, their maintenance affects these groups as well. All utilities have service pipes and cables below the highway. Co-ordination between utilities and the highway authority prevents conflict.

A stakeholder is a person or organisation who has either:

An active interest in the condition and maintenance of highways with the Borough, or Is or will be significantly affected by proposed highway works.

Additional contact information is available at
http://blackburn.cmis.uk.com/blackburn/OutsideBodies.aspx

Stakeholders are listed below, contact information for external bodies is given in Appendix 7.

Internal
Chief Officers.
Senior Managers.
Public Relations.
Public Transport.
IT.
Traffic signals
Members.
Neighbourhood Managers

External
Utilities

Gas
Water
Electricity
Telephone
Cable

Emergency Services

Police
Fire
Ambulance

Other

Environment Agency
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

External stakeholders should be contacted if they are directly affected by any proposed works.

3.5 Aims and Objectives

The purpose of communication is to both advise the stakeholders of the nature, extent and duration of any proposed works, as well as gather and evaluate feedback received, to ensure service improvement opportunities are both recognised and acted upon where possible.

It is important to keep stakeholders up to date during the course of any work especially if additional work becomes necessary or unforeseen delays arise.

These messages will reduce frustration caused by delays encountered at roadworks and will improve road safety for road users.

3.6 Methods of communication

We will make use of the most effective means of communication.

Available methods include.

Intranet.
Internet.
The Shuttle.
Elgin.
Road closure notices.
Letter drops.
Leaflets
Twitter.
Facebook.
Member briefings.

Public consultation events

3.7 Key messages

Clarity is key to effective communication, all messages should be checked for ambiguity.

All communications should contain the following information as a minimum.

What we intend to do.
When we intend to start.
How long it is expected to take.
Why we are carrying out this work.
Contact information.

Additional information could include.

The consequences of not carrying out this work.
Other options that have been considered.
Why they have been rejected.
Describe appropriate alternate routes.

3.8 Funding

The cost of communications is borne by the highways maintenance budget. It is believed that the benefits of effective communication in terms of improved efficiency and reduced delays outweigh the costs.

3.9 Monitoring and evaluation

The communications plan should achieve the following:

Improve communications with all stakeholders.
Improve the effectiveness of communication with all stakeholders.
Reduce delays.
Reduce frustration at roadworks.
Improve safety at roadworks.
Improve production.

3.10 Community Engagement and Communication – Activities

A range of tools and activities can be utilised to both improve the level of communications, as well as feedback opportunities across the Borough. These are designed to support the achievement of a more proactive approach going forwards. It is possible to utilise all of the tools and activities, or a select few, according to the

anticipated level of neighbourhood impact. A precursor to deciding the communications approach should be a Neighbourhood Impact Assessment, taking into consideration the scale of works, duration, likelihood of disruption and the direct impact anticipated within the neighbourhood, as a result of the works. Local knowledge is invaluable in assessing impact levels and opportunities to gather this local information and gain an understanding of the neighbourhood dynamics should be a primary consideration of any Neighbourhood Impact Assessment.

Project Timeline and Key Milestones	Understand projected timelines and key milestones of works/scheme to allow the development of a works/scheme communications and engagement strategy which ensures local information sharing and engagement is both informative and timely.
Neighbourhood Protection	Map timelines and works locations, incorporating Neighbourhood Impact Assessment - establish processes for informing key workers (social workers, carers, schools, bus operators etc) of potential delays
Key Contacts and Stakeholders Network (Local Level)	Establish key contacts and stakeholders to allow mapping of existing local networks.
Initial Contact (Local Level)	Undertake initial contact with key contacts and stakeholders at the local level, sharing initial project information and allowing for network review.
Briefing Sessions (Local Level)	Prepare and deliver briefing sessions where relevant appropriate to target audience; to include Members, Contact Centre, Partner Agencies, Council Officers and Key Stakeholders
Public Forums/ Consultation Events (Local Level)	Prepare and deliver public presentations. Organise and facilitate consultation events where appropriate
Public Information Sharing Networks (Local Level)	Map key public forums, local information locations, publications and social network sharing opportunities
Single Point of Contact	Promote single point of contact to better manage point of enquiry and responses.
Information Sharing (Issues)	Determine key contact within each organisation to share issues/responses information with. Avoid duplication.
Leaflets and letters (Local Level)	Prepare and distribute leaflets and letters as appropriate, providing clear opportunities for feedback
Electronic Updates – Partnership Liaison	Agree appropriate updates frequency and establish procedures for feeding into updates from all organisations. Explore My BwD functionality and capability.
Local Issues – Press	To effectively manage local press issues.

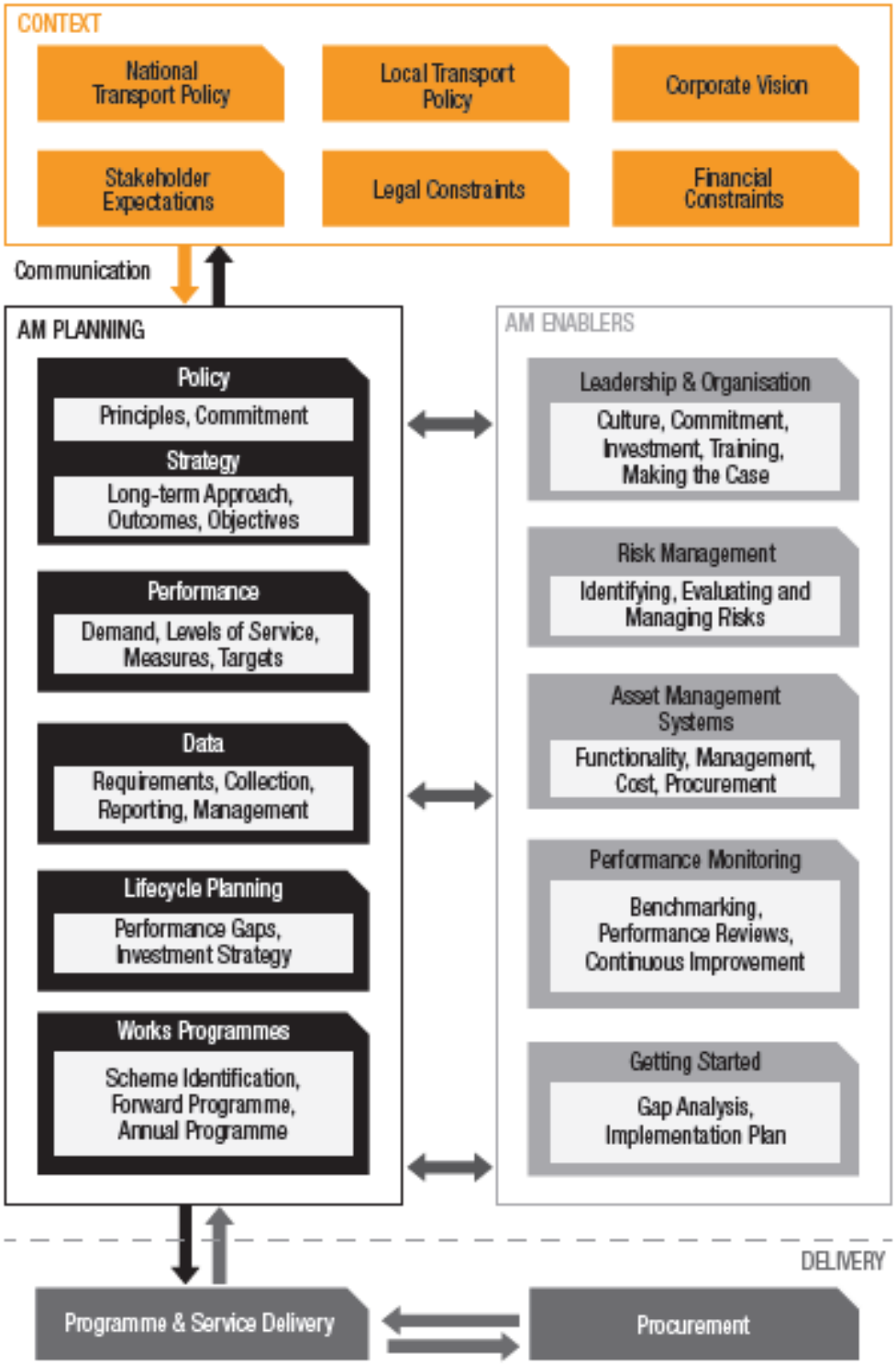
Management	
Social Network Forums	Establish information sharing protocols for wider distribution of key messages through social network forums to include project Twitter, Facebook, Web Site and re-posts on partner sites, where relevant.
Publications (Local Level)	Share articles for publications as appropriate – electronic Shuttle/Neighbourhood Newsletters etc
Website Review	Review content and update with relevant evidence (strategies, policies, information and contact updates etc) in support of DfT requirements for Highways specific web presence. To introduce a Members portal area for query handling and information sharing at a ward based level.
Web based feedback	Develop opportunities for feedback on Highways web facility (e.g Monkey Survey) sharing feedback for analysis.
Single Point of Contact	Agree resource to allow a single point of contact to co-ordinate, record and provide information and responses to enquiries/complaints (emails, phone calls, Facebook, twitter). Determine responsibility strategic vs operational.
Highways Meetings - Community Impact	Communications representative to attend relevant Highways meetings to share information on local issues raised and discuss potential solutions. Pro-actively consider potential community impact.

Part 4 Highway Asset Management Framework

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

4.1 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 5 Highways Asset Information Management.

5.1 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 industries. 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.

5.2 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.

5.3 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 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.

5.4 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.

5.5 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.

5.6 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.

5.7 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 is further underpinned by the Local Government Finance Act and local authorities are required to respond to the consultation.

The frequency and nature of the consultation can vary, for example the last consultation undertaken by the DfT was carried out in 2013, this being the first time in five years. 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 data returns 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 drives 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

5.8 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 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	Cycle Routes.	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, public access at Town Hall reception.			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.			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.		Date adopted.		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.			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.		

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.			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:	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.			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.		Road class.		
	Area.		Town.		
	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.			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.			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.			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.			Platform:	Mapinfo.
Source:	Plotted from OS background layer.			Style:	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:	Cycle routes.	Staff Days:	5
Description:	Records position of cycling routes.			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:	No.
Risk:	Reputational damage.			Code of Practice:	Yes.
Availability:	All staff.			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.			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.			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.			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.			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.			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.				

5.9 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:	Scanner survey.	Staff Days:	
Description:	Monitors the condition of the classified network.			Survey cost:	£6,000
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.			Platform:	UKPMS/Mapinfo.
Source:	Procure from accredited external contractor.			Style:	Polyline.
Refresh:	Annually.	Confidence:	High.	Quality:	High.
Currency:	Archive redundant records after six years.			Responsibility:	Asset.
Principal Information:	Section label.		Class.		LPV.
	Road name.		Cracking .		Roughness.
	Hierarchy.		Edge roughness.		

Item:	22	Subject:	CVI Survey.	Staff Days:	2
Description:	Monitors the condition of the unclassified network.			Survey Costs:	£4,000
Value:	Used to identify potential maintenance schemes. Information relayed to DfT annually.			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.			Platform:	UKPMS/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:	£3,000
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.			Platform:	UKPMS/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:	No.
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:	Capita Core.
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.
Source:	Highways inspection staff.			Style:	
Refresh:	Frequency defined by procedure.	Confidence:	High.	Quality:	High.
Currency:	Maintain all records.			Responsibility:	Highways Inspection.
Principal Information:	Text location of defect.				
	Nature of defect.				
	Target repair date.				

Item:	26	Subject:	Bridge Inspections.	Staff Days:	20
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.			Platform:	Bridge condition indicators stored in bridge record.
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:	Capita core.
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:	Capita core.
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:	Excel.
Source:	Highways staff.			Style:	Excel.
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:	Capita core.
Description:	Records number of gullys cleaned.			Survey Costs:	
Value:	Allows performance to be assessed/evaluated.			Statutory Duty:	No.
Risk:	Unknown efficiency.			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.			Code of Practice:	Yes.
Availability:	Highways staff.			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:	30
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.			Platform:	Excel.
Source:	Highways staff.			Style:	Excel.
Refresh:	Quarterly.	Confidence:	High.	Quality:	High.
Currency:	Maintain all records.			Responsibility:	Asset management.
Principal Information:	Current score of question 1 to 22.				
	Current band.				
	Appropriate evidence.				

Table 9 Current Performance Information (contd).

Item:	33	Subject:	Hand Arm vibration.	Staff Days:	Capita core.
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.			Platform:	Access database.
Source:	Operations manager.			Style:	
Refresh:	Quarterly.	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:	Capita.
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:	Word documents.
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:	Highway video survey.	Staff Days:	
Description:	To survey the carriageway and footway network, assess and report its condition.			Survey cost:	£12,000
Value:	Allows identification and prioritisation of highway works.			Statutory Duty:	No.
Risk:	Inability to accurately prioritise highway works.			Code of Practice:	Yes.
Availability:	All staff as applicable.			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.		
	Analysis of condition.		Area of network elements.		
	BRAYG rating.				

5.10 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.		

Table 10 Current Financial Information (contd).

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				

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.				

Table 10 Current Financial Information (contd).

Item:	39	Subject:	Procurement.	Staff Days:	12
Description:	Provides up-to-date cost & budget information.			Survey cost:	
Value:	Compliance with procurement regulations and standing financial instructions.			Statutory Duty:	No.
Risk:	Uncontrolled budget expenditure, non-compliance with regulations.			Code of Practice:	No.
Availability:	Management and cascaded as appropriate.			Platform:	Civica.
Source:	Management.			Style:	
Refresh:	Updated daily.	Confidence:	High.	Quality:	High.
Currency:	Archive redundant records after six years.			Responsibility:	Head of Service.
Principal Information:	Scheme costs and budget.				

Item:	40	Subject:	Whole of Government Accounts.	Staff Days:	5
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.			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:	Exor, 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.				
	Stores management system.				
	Inspection and repair transactions.				

Table 10 Current Financial Information (contd).

Item:	43	Subject:	Internal audit advice.	Staff Days:	
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:	Exor, 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:	Excel, Word, 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.				

5.11 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. The inspection of structures such as bridges, culverts and retaining walls is of prime importance and should be addressed swiftly.

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:	45	Subject:	Bridges - General Inspection	Staff Days:	
Description:	Basic understanding of bridge structures.			Survey cost:	£14,000
Value:	Ability to prioritise maintenanace works.			Platform:	BAMS.
Risk:	Unknown condition, structural deterioation.			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.				

Table 11 Gap Analysis and Action Plan (contd).

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:	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.				

Table 11 Gap Analysis and Action Plan (contd).

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.				

Table 11 Gap Analysis and Action Plan (contd).

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.				
	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.				
	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.				

5.12 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.

5.13 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 6 Performance Management

6.0 Performance Management Strategy

Introduction

Our performance is measured through the PLACE Technical Partnership, specifically against a suite of Strategic Partnership Objectives and Operational Performance Indicators (PI) and Key Performance Indictors (KPI). This performance is reviewed on a monthly basis through the submission of a range of metrics reviewed in the first instance by the relevant service area sub-group.

As the PLACE Technical Partnership has developed with each service plan, so has the focus on the KPI/PI suite. As a consequence, the focus has begun to shift from the monitoring of processes to the review of outcomes.

Background

In July 2016, following a competitive dialogue procurement exercise, Blackburn with Darwen Borough Council (the 'Authority') and Capita Symonds (now Capita Property and Infrastructure) (the 'Partner') entered into a long term strategic partnership arrangement to deliver a range of Technical Services.

6.1 Objectives of the Partnership

Each year an 'Annual Service Plan' (ASP) is produced and agreed by the PLACE Technical Partnership for the forthcoming year's objectives. To contribute to residents priorities, the Partnership will contribute to the following objectives;

- Ensure that Blackburn with Darwen Borough Council is a great place to live, work and visit
- Reduce the borough's carbon footprint
- Respond effectively to emergency situations
- Build community resilience to respond to flooding, including introducing a network of community flood wardens

- Specifically we will deliver;
    - Engineering & Highways
    - Highway Asset Management
    - Continually improve the service we provide

The Partnership will achieve this by:

- Looking at all of the resources we currently commit to services, and the intent and effectiveness of the ways in which they are deployed.
- Redesigning our services to meet the needs of our residents and communities.
- Build community resilience to respond to flooding
- Working with businesses and residents to reduce our carbon footprint

The table below illustrates the Operational and Key Performance indicators we report against on a monthly basis.

Category 2
KPI's

KPI ref	Definition	Expected	Min
KPI H3	Routine Highway Safety Inspection	100%	100%
KPI H4	Highways Reactive Safety Inspection	100%	100%
KPI H5	Highways Safety Inspection Defects	100%	100%
KPI H7	Precautionary gritting completed within time scale	Out of season	Out of season
KPI H8	Gully cleaning completed in line with schedule	100%	100%

Part 7 Risk Management

7.0 Risk Management Strategy

Introduction

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

Blackburn with Darwen Borough Council as highway authority are required to manage a variety of risks at all levels within the organisation. The likelihood and consequences of these risks can be used to inform and support the approach to asset management and inform key decisions on performance, investment and implementation of works programmes.

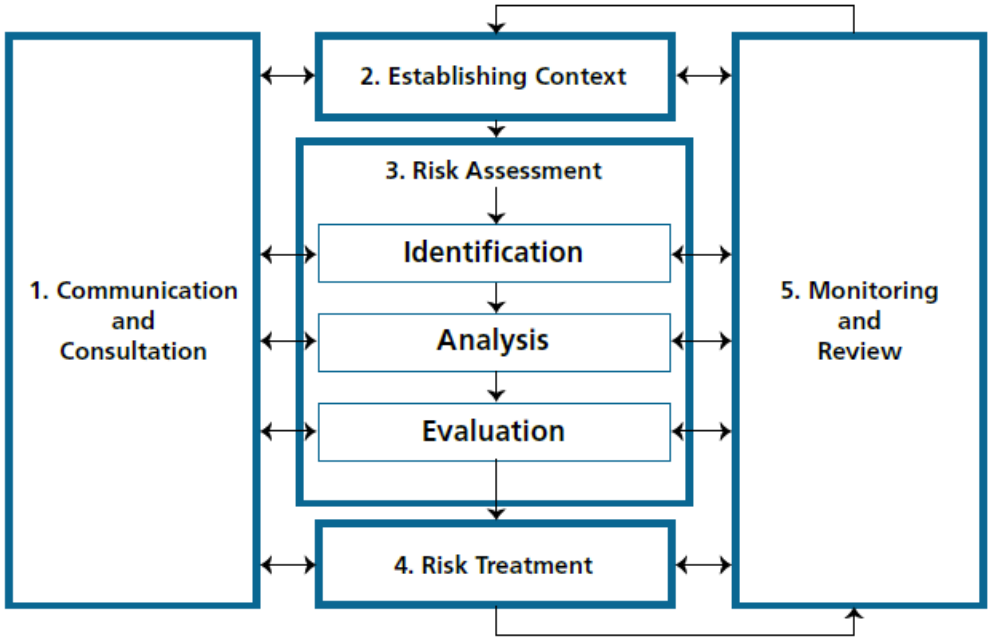
A risk can be defined as an uncertain event, which should it occur will have an effect on the desired performance of an asset or series of assets. It consists of a combination of the likelihood of a perceived threat or opportunity occurring and the magnitude of its impact on the objectives where:

- **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.

Our understanding and management of risk is fundamental to effective asset management and the approach we have adopted for the management of risk is shown in the risk management process below. ISO 31000: 2009 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.



7.1 Our 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.

Our 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 and is beyond the scope of this Guidance;
- **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.

We intend to refer to recent published guidelines by the Institute of Highway Engineers (IHE), Well Managed Highway Liability Risk. In October 2016 the UK Road Liaison Group (UKELG) published a Code of Practice on Well-managed Highway Infrastructure, which the recently published guidance is intended to support and be considered as supplementary advice, in particular Section A5, and therefore the two documents will be read in conjunction.

7.2 Communications and Consultation

Communication and consultation is vital to establishing a risk based approach with regards to highway liability exposures, therefore it is necessary to engage with a wide variety of stakeholders, each 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 our intention to consult with the above when developing our risk based approach to managing our infrastructure assets. When consulting with members of the public it is our intention to provide details on our website and invite feedback, which will be analysed and if applicable will be taken into consideration when implementing our risk based approach.

7.3 Identifying Critical Assets

The identification of our critical assets is essential for supporting the social and business needs of Blackburn with Darwen Borough Council. Our 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 the non-availability of a major structure or tunnel 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.

7.4 Evaluating the risks

Our risk assessment involves determining the likelihood and consequence of an event. The risk assessment will allow us to identify the risks to be analysed in a systematic approach to highlight which risks are the most severe and which are unacceptably high. We can then determine our level of exposure to the risk and the actions necessary to minimise that risk.

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

7.5 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.

7.6 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.

LIKELIHOOD OF EVENT OCCURRING	CONSEQUENCE OF EVENT OCCURRING				
	NEGLIGIBLE	LOW	MEDIUM	HIGH	SEVERE
NEGLIGIBLE	1	2	3	4	5
VERY LOW	2	4	6	8	10
LOW	3	6	9	12	15
MEDIUM	4	8	12	16	20
HIGH	5	10	15	20	25
KEY TO RISKS					
LOW		MEDIUM		HIGH	

7.7 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 will be documented in the ‘Highway Management Plan’, currently being developed in line with the Department for Transport’s deadline date for delivery of the risk based approach to managing infrastructure assets of September 2018. The ‘Highway Management Plan’ is currently being developed and will be available via the Authority’s website once completed.

Part 8 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 considers benchmarking important to inform our 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 our public satisfaction results with other authorities. This comparison enables us to review current levels of service provided to residents and, if necessary, revise and improvement 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 member's road network, the amount of traffic running on its network and the local change in input prices, both materials and wages.

Members 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.

Part 9 Annual Report

9.1 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.

9.2 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; 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; We know what is required and how we deliver the requirements; 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; We know what is required and how we deliver the requirements; 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; 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	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;	Significant reduction in claims against LCC for personal injury and third party damage; Safety defects are well defined with performance standards for rectification of those defects; Systems are in place to ensure proper assessment

	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; We have relevant information to support our delivery to required performance standards.	We have relevant information to support our delivery to required performance standards. We are proactive in the identification and rectification of those defects; It is likely to result in an increase in the risks associated with safety or legal deficits.	prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible; We have relevant information to support our delivery to required performance standards; 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; 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; It is assumed that the rate of deterioration exceeds 10%.	The condition of the asset is stabilised or with minor deterioration; It is assumed that the rate of deterioration is under 10%.	The condition of the asset is improving strongly with asset value increasing; 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; 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	It is likely that public opinion does not reflect the condition	Generally public perception of the condition

	deteriorating and is becoming less available, safe or fit for purpose; 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; Complaints and claims would be expected to be high.	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.	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; 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; It will not be possible to address all issues rapidly and a prioritisation of service demands will be required; An increasing backlog of maintenance needs will exacerbate the service problems and lead to a further chain reaction of deterioration; 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; 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; 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: • Summary Report for Blackburn with Darwen • 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	