



# Highway Infrastructure Asset Management Framework

September 2018



## Purpose of this document:

As a Highway Authority, we have a duty of care to maintain the safety and accessibility of highway infrastructure that is kept at public expense. As stewards and custodians of the highway infrastructure assets, in accordance with the Highways Act 1980, we must demonstrate that we have provided adequate provision for their upkeep and safety as can be reasonably expected. We shall maintain the highway infrastructure assets with consideration to whole life costs, associated risks and alignment with our corporate objectives. This document sets out the plans, policies and procedures which detail the activities the authority will implement and is effectively our asset management approach.



## Control

Version control	AMF-003 v1.0
Author	Kully Boden – Highway Asset Team Leader
Key stakeholders / contributors	<ul style="list-style-type: none"> <li>• Highway Asset Owners</li> <li>• XAIS Asset Management Ltd</li> <li>• Midland Service Improvement Group</li> <li>• Disability Hub</li> <li>• Legal Services (Risk and Insurance)</li> <li>• Communities Scrutiny Review Board</li> <li>• Cabinet Member for Neighbourhoods and Streetpride</li> </ul>
Lead Directorate	Communities and Place
Implementation due date	September 2018
Approving body	Council Cabinet
Approval date	12 September 2018
Accountable Service Director	Richard Antcliff, Service Director for Public Protection and Streetpride

## Supporting information

Policy or strategy type ( <i>statutory/non statutory and/or internal or external</i> )	Statutory and external
Equality impact assessment date completed	Wednesday 22 August 2018
Safeguarding implications / assessment date completed	N/A
Policy and Improvement review completed (Y/N)	N/A
Revised / updated date	
Next Review date	September 2019
Reviewing officer	Kully Boden Highway Asset Team Leader <a href="mailto:kully.boden@derby.gov.uk">kully.boden@derby.gov.uk</a> 01332 642013

**We can give you this information in any other way, style or language that will help you access it. Please contact us on 01332 642013 or Minicom 01332 640666**

### Foreword

The Highway Infrastructure Asset Management Framework documents the principles, concepts and approach we have adopted to deliver effective highway infrastructure asset management. It references a suite of documents which will be regularly reviewed and developed, as our understanding of the highway network and asset groups matures and as national guidance and legislation requires.

It follows a gap analysis of the Well Managed Highway Infrastructure Code of Practice: October 2016 and the Department for Transport Incentive Fund Self-Assessment questionnaire. Both documents detail recommendations which local authorities are encouraged to implement to achieve efficient and effective asset management. Some recommendations dovetail each other and the Highway Infrastructure Asset Management Framework brings together a complete set of tools which will facilitate good working practices, deliver cost effective improvements and provide value for money.

It will demonstrate prudent stewardship of our assets and better justification of funding decisions both nationally and locally.

This document should be read alongside the Highway Infrastructure Asset Management Policy and the Highway Infrastructure Asset Management Strategy.

All documents have been published on the Council's website.

### 1. Introduction

The Highway Infrastructure Asset Management Framework references the documents we will use to manage the infrastructure assets.

By highway infrastructure assets, we mean any asset owned by Derby City Council within the highway boundary, including carriageways, footways and cycleways, structures, drainage, street lighting, traffic signals and all street furniture.

These documents will be practical and therefore continuously updated as our knowledge grows and lessons are learnt in managing the asset. The framework recognises that asset management is an approach that is defined by the combination of a number of key activities. These activities have been defined through a comprehensive suite of 26 documents.

The foundations for the Highway Infrastructure Asset Management Framework and therefore should be reviewed first are:

- Highway Infrastructure Asset Management Policy
- Highway Infrastructure Asset Management Strategy

The Policy and Strategy support a data driven, evidence-based approach to maintaining our physical highway network. They are supported by ‘living documents’ which define how all the key assets can be efficiently and strategically managed in order to protect and preserve them, while maintaining the optimal level of service within the available resources. We have attempted to order the framework documentation in a logical sequence in the way you would manage an asset throughout its lifecycle.

Some documents are necessary for senior approval or cabinet sign off, indicating that our asset management approach has been adopted at the highest level.

They are subject to regular review and revision as is deemed applicable or necessary through changing circumstances, emerging guidance or new legislation.

Table 1.1 lists the documents currently identified as part of the framework.

Table 1.2 provides a brief summary of what each document includes.

**Table 1.1     Asset Management Framework Index**

<b>Document Ref:</b>	<b>Document Title</b>
AMF-001	Highway Infrastructure Asset Management Policy
AMF-002	Highway Infrastructure Asset Management Strategy
AMF-003	Highway Infrastructure Asset Management Framework
AMF-004	Stakeholders Communication Plan
AMF-005	Highway Infrastructure Asset Data Management Policy
AMF-006	Highway Infrastructure Maintenance Hierarchy
AMF-007	Highway Infrastructure Asset Inventory Policy
AMF-008	Highway Infrastructure Asset Condition & Service Inspection Policy
AMF-009	Highway Safety Inspection Manual
AMF-010	Highway Infrastructure Asset Risk Policy
AMF-011a	Highway Infrastructure Risk Management Plan
AMF-011b	Highway Infrastructure Asset Risk Register
AMF-012	Highway Infrastructure Service Levels, Performance and KPI's
AMF-013	Highway Infrastructure Reactive Maintenance Policy
AMF-014	Highway Infrastructure Lifecycle Planning
AMF-015	Highway Infrastructure Asset Prioritisation Plan
AMF-016	Highway Infrastructure Design Guide for Maintenance
AMF-017	Highway Infrastructure Planned Maintenance Policy
AMF-018	Highway Infrastructure Winter Service Policy
AMF-019	Highway Infrastructure Winter Service Operational Plan
AMF-020	Highway Infrastructure Skid Resistance Policy
AMF-021	Highway Infrastructure Skid Resistance Procedure
AMF-022	Highway Infrastructure High Friction Surfacing Policy
AMF-023	Highway Infrastructure Flood Policy
AMF-024	Highway Infrastructure De-clutter Policy
AMF-025	Highway Infrastructure Carbon Reduction Policy
AMF-026	Highway Infrastructure Asset Valuation Policy



Table 1.2 Asset Management Framework

Document Ref:	Document Title	Current Status	Cabinet Approval required
<b>AMF-001</b>	<b>Highway Infrastructure Asset Management Policy</b>		
	This sets out the high-level commitment for the Authority and our planned course of action, with regards to Highway Infrastructure Asset Management. The backbone of our approach.	100% complete	Yes – Sept 2018
<b>AMF-002</b>	<b>Highway Infrastructure Asset Management Strategy</b>		
	This strategy defines the commitment of all highway asset owners to deliver that approach against the Council's key priorities and wider stated policies, including the Local Transport Plan. It details the assets that are required to be managed and reflects recent national and regional developments in asset management.	100% complete	Yes – Sept 2018
<b>AMF-003</b>	<b>Highway Infrastructure Asset Management Framework</b>		
	The Highway Asset Management Framework documents the principles, concepts and approach we have adopted to deliver effective highway infrastructure asset management. A suite of documents which will be regularly reviewed and developed, as our understanding of the highway network and asset groups matures and as national guidance and legislation requires.	100% complete	Yes – Sept 2018
<b>AMF-004</b>	<b>Stakeholders Communication Plan</b>		
	This plan details the approach we will take to communicate with all users and stakeholders. It includes the objectives of such communication, the differing target audiences, the type of information to be communicated and methods to be used. It aims to create public awareness of the longer term objectives of our approach	In development	Yes
<b>AMF-005</b>	<b>Highway Infrastructure Asset Data Management Policy</b>		
	This sets out our policy for the collection, validation, auditing, storage, disposal and security of the data that is required for effective asset management. It includes, but is not limited to inventory and condition data collected through surveys, inspections and works records. All data is subject to the Councils' overall Data Protection Policy and protocols as well as national legislation and guidance. This data policy document complies with those requirements.	In development	No, but will be developed in consultation with Information Governance



## APPENDIX 4

Document Ref:	Document Title	Current Status	Cabinet Approval required
<b>AMF-006</b>	<b>Highway Infrastructure Maintenance Hierarchy</b>		
	This document describes how the council has produced its resilient highway network and the process to inform how maintenance hierarchies have been created. A key recommendation of the Code of Practice, is to consider the current and expected use of each road section on the network, with due regard to local economic and social factors. This in turn will determine how asset groups are prioritised and maintained and levels of service delivered.	In development	No, but will be developed in consultation with several internal teams
<b>AMF-007</b>	<b>Highway Infrastructure Asset Inventory Policy</b>		
	A comprehensive inventory of assets is the foundation of any proficient asset management system. This data must be robust and reliable and also updated at regular intervals. This document sets out our policy for maintaining that inventory and the methodology for data collection for each asset group, according to national survey requirements. It sets out the business need for collecting this data and why certain information is not collected.	In development	No, but will be developed in consultation with Information Governance
<b>AMF-008</b>	<b>Highway Infrastructure Asset Condition and Service Inspection Policy</b>		
	Derby has a wide range of survey and inspection methods to collect asset condition. This document captures all the types of inspection and assessment completed for each asset group, the systems used to manage and analyse that data, the reporting requirements and the various uses of up to date condition data.	In development	No
<b>AMF-009</b>	<b>Highway Safety Inspection Manual</b>		
	This sets out how Derby City carries out highway safety inspections, in line with sections 41 and 58 of the Highways Act 1980 and with reference to the Well Managed Highway Infrastructure Code of Practice: October 2016. It forms the main disclosure document to defend third party claims on the highway and describes the risk based approach used to determine response times and repairs.	75% complete	Yes
<b>AMF-010</b>	<b>Highway Infrastructure Asset Risk Policy</b>		
	This document considers the principal types and levels of risk that are encountered in managing the highway assets and how they are to be addressed, including service level delivery and customer satisfaction.	75% complete	Yes

## APPENDIX 4

Document Ref:	Document Title	Current Status	Cabinet Approval required
<b>AMF-011a</b>	<b>Highway Infrastructure Asset Risk Management Plan</b>		
<b>AMF-011b</b>	<b>Highway Infrastructure Asset Risk Register</b>		
	These will identify, analyse and document the risks for each asset group, in accordance with the policy, considering not just risk severity and probability, but also the likely impact, should the risk event occur. Risks will be classified and quantified along with details of appropriate plans for mitigation. This allows resources to be targeted at those risks likely to have the most severe effects on service levels and delivery.	In development	No
<b>AMF-012</b>	<b>Highway Infrastructure Service Levels, Performance and Key Performance Indicators</b>		
	The setting and monitoring of appropriate, measurable service levels and Key Performance Indicators (KPI's) is critical to delivering the service and maintaining user satisfaction. Using the Risk Based Approach principles allows levels of service and KPI's to be set that are appropriate for the use of the asset and likely rate of deterioration. This document details the processes for setting and producing the levels of service and KPI's and formal reporting to senior managers, Members and Stakeholders	In development	Yes
<b>AMF-013</b>	<b>Highway Infrastructure Reactive Maintenance Policy</b>		
	It is a requirement of all local authorities to implement the government's potholes review. First published in 2012, the document makes 17 recommendations for Government and local highway authorities to help develop best practice in dealing with and managing potholes. This is moving away from using short term interventions towards more proactive maintenance, longer-term planning and preventative approaches which are more cost effective. This document highlights how we have implemented and embedded this review and how we reactively maintain other infrastructure assets.	In development	No
<b>AMF-014</b>	<b>Highway Infrastructure Lifecycle Planning</b>		
	Lifecycle Planning is the continuous process of managing an asset throughout its life. It is the entire time during which the authority invests in it, from the initial installation to the end of its life. Planning treatments in a strategic way in each asset group, to extend the life of that asset allows us to review the whole life level of funding required & substantiate the need for sustainable long term investment.	In development	No
Document	Document Title	Current	Cabinet Approval

## APPENDIX 4

Ref:		Status	required
<b>AMF-015</b>	<b>Highway Infrastructure Asset Prioritisation Plan</b>		
To make the most effective use of the total highways infrastructure maintenance budget, the individual assets and asset groups are considered as a whole, prioritising across asset groups as well as within them. The document considers the impact on lifecycles and budgets as well as the benefits on levels of service and user satisfaction when combining maintenance treatments. This will also determine the forward work programme.		In development	No
<b>AMF-016</b>	<b>Highway Infrastructure Design Guide for Maintenance</b>		
This will detail the approved methods and treatments for maintenance of individual assets and asset groups which have been reviewed on the basis of effectiveness, cost and longevity. It will take into consideration where the asset sits on the maintenance hierarchy and set minimum standards for repair and improvements in the most cost effective way.		In development	No but will be developed in consultation with several internal teams
<b>AMF-017</b>	<b>Highway Infrastructure Planned Maintenance Policy</b>		
This document sets out the proactive and preventative measures the authority will use to manage the assets and their components. This provides the best value for money and cost effective way of maintaining a deteriorating network.		In development	No
<b>AMF-018</b>	<b>Highway Infrastructure Winter Service Policy</b>		
The Council as the highway authority has the responsibility to provide a winter service in accordance with the Highways Act 1980 Section 41(1A), which imposes a duty 'to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by ice and snow'. The purpose of this policy is to clarify both the standard and extent of the winter maintenance service we will provide on the highway network.		85% complete	Yes

Document	Document Title	Current	Cabinet Approval
----------	----------------	---------	------------------

## APPENDIX 4

Ref:		Status	required
<b>AMF-019</b>	<b>Highway Infrastructure Winter Service Procedure</b>		
This operational plan sets out the available resources and how they are to be deployed, in line with national guidance. It sets out how salt stockpiles are maintained and how information is to be communicated to the public and stakeholders. It details collaboration with other front line services and neighbouring authorities to provide a treated network.		100% complete	No
<b>AMF-020</b>	<b>Highway Infrastructure Skid Resistance Policy</b>		
This Skid Policy relates to the maintenance of adequate skid resistance on the authorities highway network and the application of procedures to deal with those sites identified as deficient or requiring further investigation. This policy details the approach to the monitoring, measurement and management of skid resistance on parts of the network		100% complete	Yes
<b>AMF-021</b>	<b>Highway Infrastructure Skid Resistance Procedure</b>		
This procedure details the practical way we will implement the Council's skid policy, providing a detailed methodology on identifying skid deficient sites, the process for deciding on their subsequent treatment and how they should be prioritised for action or repair.		100% complete	No
<b>AMF-022</b>	<b>Highway Infrastructure High Friction Surfacing Policy</b>		
High Friction Surfacing is applied as a thin veneer to the road surface at locations (such as the approaches to traffic lights) where there is a high risk of an accident, and good frictional qualities are required to avoid vehicles skidding when braking hard. This policy sets out our approach and appropriate application of this treatment on the network and how to evaluate the suitability of this treatment during scheme design		In development	No
<b>AMF-023</b>	<b>Highway Infrastructure Flood Policy</b>		
The authority is responsible for developing and applying a strategy for local flood risk management in the city and for maintaining a register of flood risk assets. We also have a lead responsibility for managing the risk of flooding from surface water, groundwater and ordinary watercourses. This policy sets out our approach and how to ensure future projects do not increase the risk of flooding.		In development	Yes
<b>Document Ref:</b>	<b>Document Title</b>	<b>Current Status</b>	<b>Cabinet Approval required</b>

## APPENDIX 4

<b>AMF-024</b>	<b>Highway Infrastructure Declutter Policy</b>		
Local authorities have a vital role in managing the street environment and ensuring that the design and installation of new equipment or street furniture is in keeping with the character of an area. Opportunities to simplify the street scene and remove obstacles provide a balanced and safe environment for different road users. The policy takes into account how this can be considered in scheme design and achieved through maintenance activities.		In development	No
<b>AMF-025</b>	<b>Highway Infrastructure Carbon Reduction Policy</b>		
As a contributor to the authority's carbon emissions, it is essential that highway asset owners have a policy in place to manage and minimise these in order to assist in the achievement of carbon reduction targets. The policy promotes sustainable levels of service, treating the right part of the network at the right time with the right treatment, working towards a reduction in the rate of use of raw materials.		In development	No
<b>AMF-026</b>	<b>Highway Infrastructure Asset Valuation Policy</b>		
The highway infrastructure assets are vital to the economic viability and development of the city and are the most valuable publicly owned asset, with a replacement value of approximately £2.8billion. The principles of asset management and Whole of Government Accounts valuation identify the estimated replacement value of the highway network. This document describes how we calculate our valuation, which in turn provides a platform for supporting investment decisions, substantiating the need for appropriate and sustainable long term investment and the opportunity to bid for available funds.		In development	No