Stockton-on-Tees Borough Council

Highway Infrastructure Asset Management Strategy

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Stockton-on-Tees
BOROUGH COUNCIL

Contents

1. Introduction

1.1 Overview

The Highway Asset represents one of the biggest capital assets of the Authority and is vital to national economic prosperity. The comfort and safety in which people can move from place to place, and the appearance of local streets are important contributors to quality of life.

Section 41 of the Highways Act 1980 imposes a duty on the Highway Authority to maintain the adopted highway at public expense it does not however specify the expected levels of maintenance and guidance, details on this can be found in the UK Road Liaison Groups published document 'Well Managed Highway Infrastructure - A code of Practice'.

1.2 Purpose and Context

The purpose of this Highway Infrastructure Asset Management Strategy (HIAMS) is to demonstrate Stockton-on-Tees Borough Council's long-term approach to managing the adopted highway infrastructure assets by defining the expected levels of service applied to the assets, the performance targets assigned to each asset, the expectations of customers and stakeholders, current financial constraints and proposed investment strategies.

The main purpose of highway Infrastructure asset management is to ensure the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.

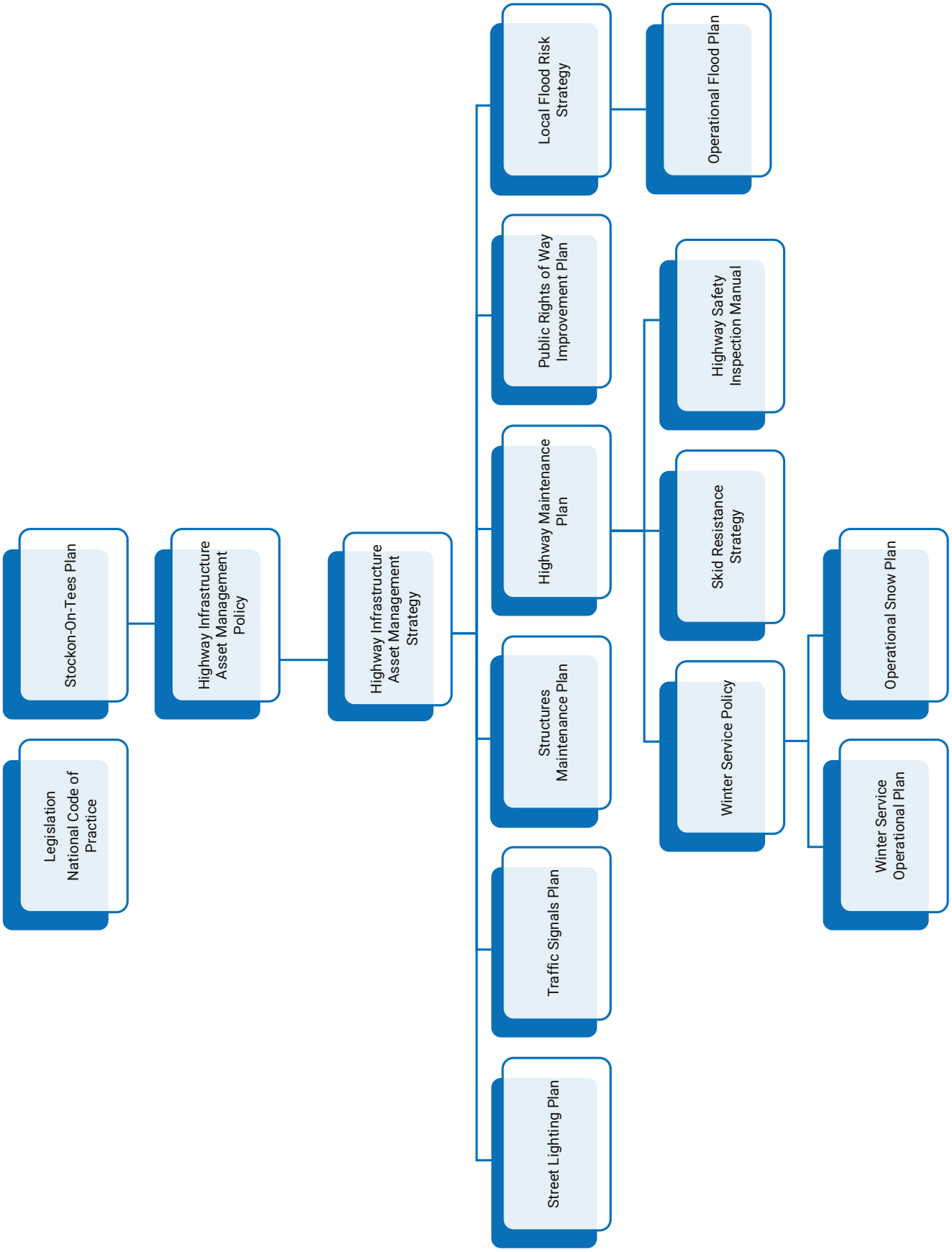
The Stockton-On-Tees plan sets out the five priorities for the Borough, which include:

- **Priority one** - The best start in life to achieve big ambitions
- **Priority two** - Healthy and resilient communities
- **Priority three** - A great place to live, work and visit
- **Priority four** - An inclusive economy
- **Priority five** - A sustainable Council

A well-maintained highway infrastructure asset plays a vital role in supporting the five priorities of the Stockton-on-Tees plan.

Primary Objective	Secondary Objective	Measure
Network Safety	Complying with statutory objectives	Repudiation rate of Public Liability Claims
	Meeting user's needs for safety	Percentage of Cat 1A, 1B and 2H safety defects rectified within stated response times
		Maintain skid resistance of road surfaces (%age of tested network below investigatory level)
Customer Service	User experience/ satisfaction	NHT Public Satisfaction Survey
		Maintenance Scheme Feedback Questionnaires
	Communication	NHT Public Satisfaction Survey
		Maintenance Scheme Feedback Questionnaires
	Information	NHT Public Satisfaction Survey
		Maintenance Scheme Feedback Questionnaires
	Levels of Service	NHT Public Satisfaction Survey
		Annual condition surveys
		Maintenance Scheme Feedback Questionnaires
Network Serviceability	Ensuring Availability	NHT Public Satisfaction Survey
	Achieving Integrity	Annual condition surveys
	Maintaining Reliability	NHT Public Satisfaction Survey
	Resilient Network Plan	Biennial review of the network reflecting any changes or lessons learnt following relevant events
	Managing Condition	Forward programme of preventative maintenance
		Annual condition surveys
Network Sustainability	Minimising cost over time	Lifecycle planning
	Maximising value to the community	NHT Public Satisfaction Survey, Post scheme satisfaction surveys
	Maximising environmental contribution	Reducing energy consumption
		Reducing CO2 emissions

Full details of our service standards, performance targets and measures against the objectives are in Section 6. The following document framework shows how this Highway Infrastructure Asset Management Strategy (HIAMS) relates to other Council plans and policy documents.



2. Asset Description

2.1 Asset Inventory

To set relevant levels of service for each of the highway assets it is important to know how much of each asset there is and where it is at. Within Stockton this information is held in databases in the form of an inventory, and the following table outlines the major highway assets managed by the Council as of 31 March 2025.

Asset	Element	Unit	Quantity	Data Confidence
Carriageway	A - Roads	Km	93.50	High
	B - Roads	Km	13.80	High
	C - Roads	Km	108.10	High
	Unc Roads	Km	667.70	High
Footways	Adopted Network	Km	1,070.55	High
	Public Rights of Way	Km	196.00	High
Structures	Bridges	No	71	High
	Footbridges	No	124	High
	Culverts	No	123	High
	Retaining Walls (>1.5m)	No	54	High
	Subways & Underpasses	No	7	High
	Vehicle Restraint Systems	Km	18.52	Medium
	Other Structures	No	29	High
Street Lighting	Columns	No	29,707	High
	Feeder Pillars	No	236	High
	Illuminated Signs	No	1447	High
	Illuminated Bollards	No	299	High
	Subway Units	No	103	High
Drainage	Gullies	No	44,000	Medium

Asset	Element	Unit	Quantity	Data Confidence
Traffic Management	Junction Traffic Signals	No	81	High
Traffic Management Street Furniture	Pedestrian Crossing Signals	No	94	High
	School Crossing Patrol Lights	No	51	Medium
	VAS Signs	No	76	Medium
	SID Signs	No	49	Medium
	Non-Illuminated Signs	No	15,041	Low
Street Furniture	Pedestrian Barrier	Km	1.91	Medium
	Bollards	No	10,842	Medium
	Litter Bins	No	1,270	Medium
	Weather Stations	No	3	High
	Salt Bins	No	361	High

Where an asset has a low or medium data confidence level then an inventory improvement action plan is developed based on priorities and available resources. Action Plans will only be implemented where there are demonstrable benefits when compared to the cost of collecting and maintaining the data.

2.2 Asset Growth

The quantity of highway infrastructure assets, managed by the Council, continues to grow on an annual basis due to the development of land for housing, resulting in the adoption of the highway infrastructure assets.

As these are relatively new at the adoption stage, it is anticipated that this additional infrastructure will have little impact on short term funding requirements, but the impacts will increase as the assets age.

On average approximately 3km of new carriageway is added to the network each year together with associated footways, street lighting, drainage, traffic signals, signs and street furniture. There are no expectations that this growth rate will differ over the next 5 years.

2.3 Improvement Action Plan

To improve the level of confidence of the asset data, the following action plans have been developed.

Asset	Action Plan
Vehicle Restraint Systems	The availability of asset data supports the development of a forward works programme for upgrading vehicle restraint systems, enhancing confidence in the accuracy and reliability of planning decisions.
Non-Illuminated Signs	Asset data will be updated as resources become available. Considering emerging AI technologies and the expansion of the asset management system to minor assets analysis is ongoing to identify a cost-effective method of collecting and analysing the inventory data for this asset.
Pedestrian Barriers	Asset data will be updated as resources become available. Considering emerging AI technologies and the expansion of the asset management system to minor assets analysis is ongoing to identify a cost-effective method of collecting and analysing the inventory data for this asset.
Bollards	Asset data will be updated as resources become available. Considering emerging AI technologies and the expansion of the asset management system to minor assets analysis is ongoing to identify a cost-effective method of collecting and analysing the inventory data for this asset.
Litter Bins	An available dataset of litter bin assets now provides clear visibility of their locations and quantities. This supports the development of a forward works programme for managing litter bins, improving confidence in planning and operational decisions, and enabling more efficient service delivery and maintenance scheduling.

Those assets that are currently subject to a robust regime of regular condition surveys, safety inspections or special inspections will also be subjected to inventory updates as an integral part of this regime. These assets have been identified with a high confidence rating.

3. Community Requirements

3.1 Stakeholders

One of the fundamental principles of any asset management system is to identify the stakeholders associated with the asset and understand their needs, inputs and expectations when setting the service standards for the various assets.

The stakeholders relevant to Stockton's highway asset management system are detailed in Appendix 1.

To obtain information on stakeholder's views the council participates in local and national surveys, including:

- National Highways and Transport Public Satisfaction Survey

The Council also welcomes feedback from stakeholders on any aspect of its highway's services or any aspect of asset management strategy.

If you would like to leave feedback, please use the following contact details:

- Website: **www.stockton.gov.uk**
- Email: **HTD@stockton.gov.uk**
- Telephone: **01642 393939**

Stakeholder contacts with the Council regarding highways are managed using a customer relationship management (CRM) system. The system is used to record and categorise contacts, outline the actions taken and log responses provided to the stakeholder.

Additionally, when maintenance schemes are undertaken in urban or suburban areas, the Council proactively engages with stakeholders who are most directly affected by the works. This engagement includes distributing letters prior to the commencement of the scheme and collecting feedback through a post-scheme online questionnaire. Responses are reviewed, and any issues raised are addressed accordingly.

Where appropriate, lessons learned are incorporated into the planning and delivery of future schemes of a similar nature.

3.2 National Highways and Transportation (NHT) Public Satisfaction Survey

Stakeholder satisfaction is measured on an annual basis through the NHT survey.

The survey is sent to 3,300 residents of the Borough chosen at random from the electoral register. The survey produces an average response rate of approximately 19%.

The survey gives participating authorities:

- clearer insight to how the public perceives their performance
- a consistent set of historical data for setting service levels and a means of measuring the impact of service improvements
- access to the best performing authorities and the opportunity to learn from the good practice of others
- the ability to benchmark results against similar authorities locally and nationally

Full results of the most recent survey are available at: NHT Networks | National Highways and Transport Network.

Key results from the recent surveys, with a score given out of 100, and historical trends are:

Key Benchmark Indicator		2021	2022	2024
KBI 01 - Overall	Stockton	56	54	52
	National Average	52	51	49
KBI 11 - Pavements & Footpaths	Stockton	54	54	49
	National Average	52	52	49
KBI 18 - Management of Roadworks	Stockton	54	52	50
	National Average	47	45	43
KBI 23 - Condition of Highways	Stockton	35	38	25
	National Average	32	34	24
KBI 24 - Highway Maintenance	Stockton	52	50	46
	National Average	47	46	41
KBI 25 - Street Lighting	Stockton	69	67	64
	National Average	62	62	60

4. Financial Summary

4.1 Funding and Budget Allocations

Funding for highway maintenance is a combination of capital and revenue funding. In general revenue funding is provided by the Council whilst capital funding is from Central Government.

Stockton-on-Tees Borough Council is committed to maintaining its highway infrastructure to a high standard through a carefully balanced approach to capital investment, revenue spending and long-term asset management planning. This ensures that key elements of the network - including carriageways, footways, bridges, street lighting, traffic signals, drainage and public rights of way remain safe, functional and fit for the future.

The capital budget is primarily used for planned, larger-scale improvements and renewals. This includes investment in different methods of resurfacing including micro surfacing, thin surfacing and preservation as well as patching and joint sealing of roads and footways, helping to address surface deterioration before it becomes hazardous or costly to repair. Funding is also directed toward the inspection, maintenance and strengthening of bridges and other highway structures, supporting their continued safe use.

Capital spending also covers upgrades to street lighting, which not only improves lighting quality and public safety but also contributes to the Council's carbon reduction targets. Further allocations support the modernisation of traffic signals, enhancing traffic flow and pedestrian safety, and major drainage improvements, such as verge restoration, flood prevention measures and alleviating surface water issues.

In parallel, the revenue budget funds the essential day-to-day maintenance activities that keep the network operational. This includes reactive pothole repairs, undertaken in response to inspections and public reports, and routine gully cleansing to ensure effective drainage and reduce flood risk. Sign maintenance, vegetation clearance, grit bin management and the upkeep of Public Rights of Way (PROWs) also fall under revenue-funded services.

To deliver a sustainable, value-for-money service, the Council emphasises a balance between reactive and preventative maintenance. Reactive maintenance responds to issues such as potholes, structural damage and blocked gullies - typically unplanned and urgent. Preventative maintenance, in contrast, focuses on early interventions like resurfacing, drainage clearance and protective treatments to prevent deterioration and extend asset life.

Increasing the focus on preventative maintenance offers long-term savings and improved reliability. By tackling issues early, the Council can reduce the frequency and severity of reactive repairs, enhance safety and improve service continuity.

This is achieved through:

- **lifecycle planning** - monitoring the condition of assets over time to plan maintenance at optimal points, improving efficiency and cost forecasting
- **robust work programmes** - establishing clear schedules of preventative work to avoid future failures and ensure consistent standards
- **risk-based approach** - prioritising maintenance where there is the greatest risk to public safety or infrastructure performance

The Council is also embracing new innovations, including advanced software for improved budget planning and financial management, long-lasting materials to enhance road durability, low-carbon alternatives, and electric equipment to help minimise the environmental impact of infrastructure projects.

Collaboration with contractors supports delivery efficiency, while community engagement, such as feedback surveys, ensures that local needs are reflected in maintenance priorities.

By investing wisely and planning strategically, Stockton-on-Tees Borough Council is delivering a resilient, cost-effective and sustainable highway network for the benefit of all road users.

5. Investment Strategies

5.1 Lifecycle Planning

Life cycle planning is used by the Council to understand the long-term relationship between future funding provision and the resulting condition and performance levels of the highway assets.

To assist highway authorities with planning, the Highways Maintenance Efficiency Programme (HMEP) has developed a set of lifecycle planning toolkits which model the effects on the condition of the asset based on varying funding levels.

The funding levels used can vary from a do-nothing approach (for example: only carry out reactive works as defects arise) to an elimination of backlog in a short space of time followed by maintaining the asset in a pristine condition. However, given the existing and predicted levels of funding, neither of the extremes of funding are a viable alternative, so the two main modelling options that have been analysed are:

- Prediction of the condition of the asset based on the existing funding levels detailed in Section 4
- The levels of funding required to maintain the assets in their current measured condition

The level of complexity of each asset model is dependent on the asset data available and the deterioration model used. The inputs to and outputs from the lifecycle plans have been used to summarise the following investment strategies for each asset.

5.2 Carriageways

The current budget allocation is below the required level it will not be possible to maintain the asset in its current condition. However, as current condition is better than the performance targets detailed in Section 6 it will be possible to place the asset into a managed deterioration over the short term until its condition reaches the performance targets.

A maintenance strategy based on a 'prevention is better than cure' approach using targeted preventative maintenance in preference to reactive repairs works should achieve the best possible condition for the available budget.

This will entail the following:

- continued monitoring of the condition of the carriageway network based on SCANNER surveys, skid resistance surveys and visual inspections
- introduction and implementation of a new asset management system which will in time cover all assets and allow for an integrated asset management approach to the maintenance of the network
- maintenance schemes identified and prioritised based on up-to-date condition surveys

- targeted use of surface treatments on suitable roads. (Surface dressing on rural roads, micro-asphalt on lightly trafficked urban estate roads)
- monitoring and review of reactive potholing works to determine if greater efficiency can be achieved through structural patching or the implementation of new techniques
- implementation of a risk-based approach to defect identification and repair in line with the recommendations of the Well Managed Highway Infrastructure Code of Practice
- drainage improvement schemes and regular cleaning of drainage systems and gulleys will be undertaken to prevent water accumulation and reduce the risk of flooding
- routine verge maintenance will be carried out to maintain visibility, safety, and overall network condition
- surface dressing will be applied to appropriate roads to restore skid resistance and extend pavement life
- preservation treatments will be implemented to slow deterioration and maximise the lifespan of existing road surfaces

5.3 Footways

The current budget allocation is at the required level it should be possible to maintain the current condition of the asset, but this can only be achieved through a targeted maintenance programme of replacing existing flagged footways with bituminous ones in residential areas in preference to planned maintenance schemes on existing bituminous footways thereby placing the bituminous footways into managed decline.

This will entail the following:

- continued monitoring of the condition of the footway network based on Footway Network condition Surveys (FNS)
- introduction and implementation of a new asset management system which will in time cover all assets and allow for an integrated asset management approach to the maintenance of the network
- maintenance schemes identified and prioritised based on up-to-date condition surveys
- implementation of a risk-based approach to defect identification and repair in line with the recommendations of the Well Managed Highway Infrastructure Code of Practice

5.4 Street Lighting

The current budget allocation is below the required level it will not be possible to maintain the street lighting stock in its current condition.

The current condition of the street lighting column assets is generally good following the major capital investment scheme on street lighting which completed in 2018.

A maintenance strategy based on a targeted replacement programme should achieve the best possible condition for the available budget. This will entail the following:

- continued monitoring of the condition of street lighting columns and other lit assets through a targeted programme of structural testing and visual inspections
- introduction and implementation of a new asset management system which will in time cover all assets and allow for an integrated asset management approach to the maintenance of the network
- replacements programmes identified and prioritised based on condition results
- de-illumination of lit bollards as they fail
- de-illumination of lit signs -and in line with national guidelines and local safety considerations

5.5 Structures

In line with the Association of Directors of Environment, Economy, Planning and Transport (ADEPT) Bridges Group Document - BCI Vol. 3: Evaluation of Bridge Condition Indicators. Our current bridge condition scores suggest that the overall stock is in fair condition. However, some individual bridges may be in severe condition and at risk of rapid deterioration if adequate maintenance funding is not secured. Additionally, there is a moderate backlog of maintenance work that requires attention to prevent further decline.

The current budget allocation is below the required level it will not be possible to maintain the current condition. Therefore, the focus will shift to managing decline strategically using asset management techniques to optimise performance, prioritise critical needs, and extend asset life where possible.

5.6 Traffic Signals

The outputs from the lifecycle plans, based on existing budget levels, predict that the condition of the traffic signal assets at the end of a 20-year lifecycle will be.

The current budget allocation is below the required level it will not be possible to maintain the traffic signal stock in its current condition. However, a targeted programme of works on entire junctions rather than individual signal units should ensure that all priority junctions are maintained in a good condition whilst minimising the number of other junctions that exceed their designed 'useful' life. In most instances the useful life of a traffic signal equipment is determined by the age and availability of replacement parts, whilst this is nominally quoted as 20 years for most equipment, traffic signal equipment can be maintained in working order beyond this.

5.7 Street Furniture

This covers a wide range of assets including non-illuminated signs, pedestrian barriers / guardrails, litter bins, salts bins. The age of many of these assets is unknown and as such it is extremely difficult to model the lifecycle and deterioration of the asset. The process of collecting and maintaining asset data is relatively expensive in terms of cost and resource for an asset that is generally maintained on a replace on fail strategy and as such no formal investment strategy is provided for this asset. Items of street furniture will only be considered for replacement under larger schemes or through reactive maintenance.

To declutter the highway network where a non-regulatory highway sign fails and requires replacement a review should be undertaken to determine if the asset is still necessary and signs will not be replaced where appropriate.

6. Service Standards

6.1 Purpose

To measure our performance in delivering this highway asset management strategy the following service standards have been developed based on data and information that is already collected for other purposes.

Publishing these standards enables stakeholders to understand what they can expect from our transport assets. The risks that may prevent these service standards being met are given in section 7 of this strategy.

Performance measures to meet the Code of Practice objectives as detailed in section 1.2 are:

Primary Objective	Secondary Objective	Performance	
		Measure	Actual 2024/25
Network Safety	Complying with statutory objectives	Repudiation rate of Public Liability Claims	78.3%
	Meeting user's needs for safety	Percentage of defects rectified within stated response times. Cat 1A Cat 1B Cat 2H	90% 90% 73.4%
		Maintain skid resistance of road surfaces (% of tested network at or below investigatory level)	Principal Roads - 40% Non-Principal Roads - 47%
Customer Service	User experience / satisfaction	NHT Public Satisfaction Survey KBI 01 (2024 National Average = 49)	52
	Communication & Information	NHT Public Satisfaction Survey KBI 18 (2024 National Average = 43)	50
	Levels of Service	NHT Public Satisfaction Survey KBI 24 (2024 National Average = 41) KBI 25 (2024 National Average = 60)	46 64
		Annual condition surveys	See Section 6.2

Primary Objective	Secondary Objective	Performance	
		Measure	Actual 2024/25
Network Serviceability	Ensuring Availability	NHT Public Satisfaction Survey KBI 17 (2019 National Average = 45)	47
	Achieving Integrity	Annual condition surveys	See Section 6.2
	Maintaining Reliability	NHT Public Satisfaction Survey KBI 23 (2024 National Average = 24)	25
	Managing Condition	Forward programme of preventative maintenance	Multi-year forward program for major assets
		Annual condition surveys	See Section 6.2
Network Sustainability	Minimising cost over time	Lifecycle planning	See Section 5
	Maximising environmental contribution	Reducing energy consumption	5.5m kWh saved annually
		Reducing CO2 emissions	3140t CO2 saved annually

The results indicate that stakeholder satisfaction remains relatively high compared to the national average across all authorities participating in the NHT surveys. However, it is becoming increasingly challenging to maintain the condition levels of certain assets at their target standards. This will require a redistribution of funding across asset types, as reflected in the investment strategies outlined in Section 5. These strategies will continue to be monitored over the coming years to ensure effective resource allocation.

6.2 Asset Performance

For each individual asset type the following service levels have been adopted to measure performance against this strategy.

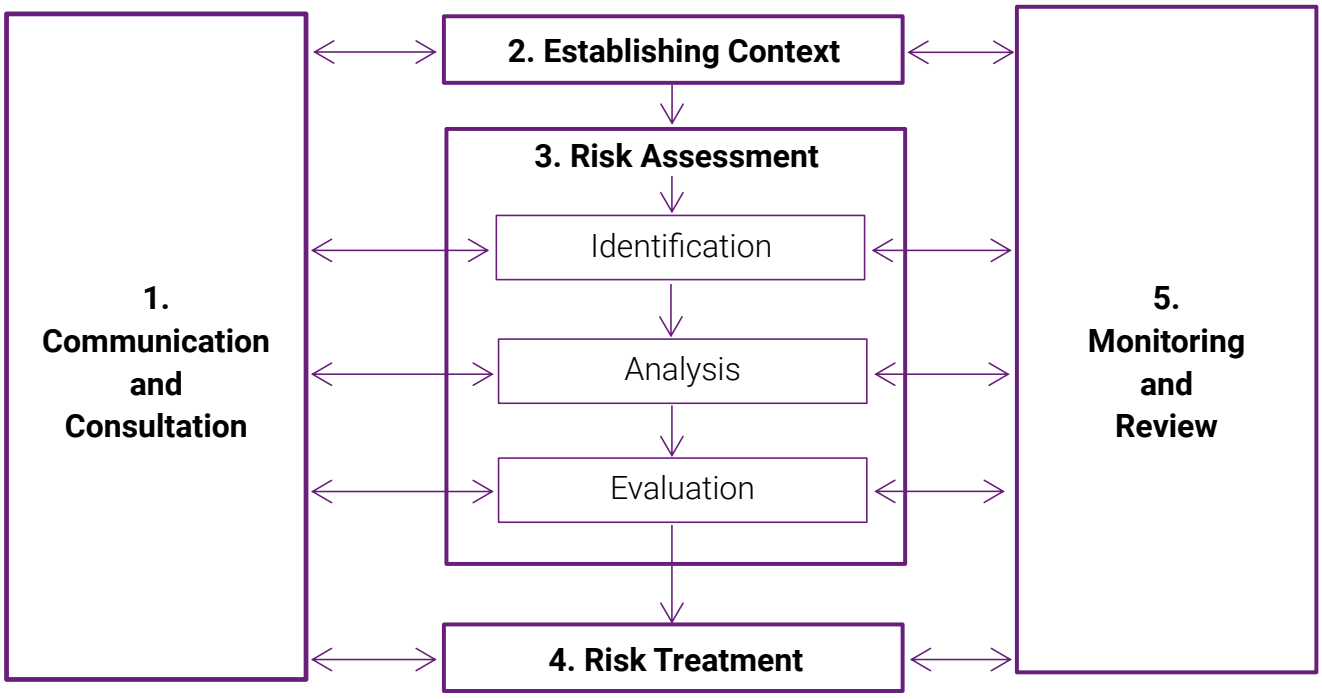
Asset	Measured By	Performance Levels		
		Target	FYE 2023 Actual	FYE 2024 Actual
Carriageway	% of Principal Roads where maintenance should be considered (A-Roads)	4%	1%	1%
	% of Non-Principal Roads where maintenance should be considered (B and C Roads)	7%	1%	1%
	% of Unclassified Roads where maintenance should be considered	17%	20%	22%
Structures	Bridge Stock Condition Indicator (BCI(avg))	80%	78.46%	78.05%
	% of bridges with critical elements in a poor condition (BCI(crit)<55)	10%	15.78%	15.78%
Street Lighting	% of columns exceeding their average expected service life	10%	11%	12%
Traffic Signals	% of installations that have exceeded their expected service life (15 years)	5%	5%	5%

7. Risk Management

7.1 Risk Management Strategy

As the highway authority we must manage a variety of risks at corporate, strategic, tactical and operational levels. The likelihood and consequence of these risks can be used to inform and support our approach to managing the assets and inform key decisions regarding our service standards and investment strategies.

The adoption of a risk-based approach to asset management is advocated within the Well Managed Highway Infrastructure Code of Practice, with the 5-stage risk management process illustrated below being utilised to support the successful implementation of this Highway Infrastructure Asset Management Strategy:



The risks associated with the successful implementation of this strategy have been identified and are detailed in Section 7.2

Tactical and operational risks associated with the management of the highway asset are the responsibility of the individual service teams with risks identified from experience of the teams. Information highlighted via this process is captured electronically and reviewed as required particularly in relation to programmes or individual projects.

Significant risks are escalated in line with the corporate risk management process through the Council's internal project governance processes.

7.2 Risks to this Strategy

The main risks to the successful implementation of this strategy which could prevent the attainment of the service standards specified in this strategy are:

Risk		Action if risk occurs
Assumption	**Consequence**	
Strategy assumes normal winter weather rather than severe or extreme	Adverse weather can lead to accelerated deterioration of the asset than have been allowed for in the models	Lifecycle plans, budgets and this strategy will be updated as required
Available budgets have been assumed based on latest available information	Funding levels reduce over the term of the strategy	Lifecycle plans, budgets and service standards will be revised to accurate levels
Lifecycle plans are based on current condition data and deterioration models	Assets deteriorate quicker than modelling would suggest and the investment required to meet the service standards is insufficient	Service standards revised to reflect altering deterioration rates
Reduction in revenue funding which would reduce the level of resource available to deliver the strategy	Staff and other resources are not allocated to delivering and monitoring delivery of the strategy against service standards	Predictions and this strategy will be revised

Appendix 1 - Stakeholders

Version - October 2025

Stakeholder	Needs / Requirements	Inputs (to asset management process)	Outputs
Central Government Departments Tees Valley Combined Authority	Legislative / Regulatory	Acts of Parliament Codes of Practice	Condition Data (Single Data List) Inventory Returns (R199b)
Cabinet Cabinet Member Director of Community Service and Transport (CS&T) Director of Finance and Business Services Highway Transport and Design Manager Finance and Business Service - Finance, Governance and Asset Finance and Business Services - Business Support and Information	Manage adopted highway in line with statutory duty and in support of corporate vision Valuation of adopted highway asset in line with statutory requirements Performance Indicators	Corporate Plan Service Plan Valuation processes (deadlines)	Asset Management Policy Asset Management Strategy Highway Infrastructure Asset Management Plan Highway Maintenance Plan Highway Safety Inspection Manual Structures Maintenance Plan Street Lighting Plan Surface Water Management Plan Local Flood Risk Management Strategy Performance Indicators Highway Infrastructure Strategic Risk Register

Stakeholder	Needs / Requirements	Inputs (to asset management process)	Outputs
Local Government Association Chartered Institute of Public Finance and Accountancy United Kingdom Roads Liaison Group and associated boards (asset management, bridges, lighting) North East Highways Alliance Tees Valley Highway Infrastructure Asset Management Group	Collaborative Working	Lifecycle Planning Toolkits Valuation Guidelines Highway Infrastructure Asset Management Guidelines Learning Toolkits Training Networking Opportunities Best Practice sharing Networking Opportunities	Knowledge Hub Mutual Assistance Catalogue
Members of Parliament Members of European Parliament Elected Members Town and Parish Councils	Responding to constituents' needs and concerns	Correspondence	Responses in line with corporate guidelines Scheme Lists and feedback on satisfaction
All users of the adopted highway network Local Businesses PD Ports Petrochemical Industries Emergency services	Managed / Maintained Network Responses to Correspondence Satisfaction with Service	Defect Reports Works Requests Stakeholder Satisfaction Surveys	Maintenance Schedules (Scheme Lists) Responses in line with corporate guidelines Reactive Maintenance responses in line with defined levels of service.

Stakeholder	Needs / Requirements	Inputs (to asset management process)	Outputs
Highway, Transport & Design. CS&T - Care for Your Area CS&T - Construction and Facility Services Framework Suppliers Consultancy Partners Underwater Inspection Specialists	Asset Management Processes. Maintenance Regimes	Condition survey results. Safety inspection reports. Special inspection reports. Requests for work	Highway Infrastructure Asset Management Plan Highway Management Plan Structures Management Plan Street Lighting Plan Local Operational Flood Plan Scheme Lists
Local Media / Broadcasters and Social Media HR, Legal and Communications - Communications, Consultation and Engagement Emergency Planning	Communication	Information Only	Timely information relevant to the current situation or request
Finance and Business Services, Finance, Governance and Assets, Procurement and Governance North East Procurement Organisation Local Enterprise Partnerships	Collaborative working and bargaining	'Enhanced' buying power Procurement processes	Scheme lists Framework contracts

Stakeholder	Needs / Requirements	Inputs (to asset management process)	Outputs
Condition survey supplier Skid resistance survey supplier Skid Resistance survey Data processors United Kingdom Pavement Management System Asset Management Software Gazetteer data validation	Data	Survey data Street Gazetteer	Condition data Maintenance backlog Inventory data Valuation data NSG Integrated Transport Network
National Highways and Transportation survey Framework Surfacing Contractor	Collaboration	Customer Satisfaction Surveys (NHT Surveys) Benchmarking Surveys (CQC Surveys) Post scheme satisfaction surveys	Data analysis and lessons learnt
Statutory Undertakers Developers National Highways (+ appointed maintenance agents) CS&T - Construction and Facility Services	Co-ordination of works Supervision of works	Permit notices S50 Licenses S38 / S278 Agreements	Resolution of conflicts Adoption of new assets Embargoes on highway maintenance schemes Maintenance of strategic diversion routes