



Name of meeting: Cabinet
Date: 22nd September 2015

Title of report: Highway Asset Management

Is it likely to result in spending or saving £250k or more, or to have a significant effect on two or more electoral wards?	Yes
Is it in the <u>Council's Forward Plan</u> ?	Yes
Is it eligible for "call in" by <u>Scrutiny</u> ?	Yes
Date signed off by <u>Director</u> & name	Jacqui Gedman - 11/09/15
Is it signed off by the Director of Resources?	David Smith - 10/09/15 <i>Debbie Hogg on behalf of</i>
Is it signed off by the Assistant Director – Legal, Governance & Monitoring?	Julie Muscroft - 11/09/15
Cabinet member <u>portfolio</u>	Cllr Steve Hall Place (Investment and Housing)

Electoral wards affected: None
Ward councillors consulted: None

Public or private: Public

1. Purpose of report

Cabinet is asked for commitment to the implementation of highway asset management and endorse the Highway asset management policy and strategy.

2. Key points

- 2.1 Highways, including roads, pavements, structures, street lighting, traffic signals, signs and road markings are the council's most valuable asset. The cost of completely replacing all the highways infrastructure would be £3.7 billion. Managing our highways is a critical challenge to Kirklees Council. We have to manage an ageing network with high public expectations for safe, reliable and comfortable travel. At the same time, resources are reducing, with less funding available so increasing pressure on the delivery of the service.

Our highways are increasingly fragile and less resilient to damage from wear and tear, ageing, increasing traffic and severe weather. This regularly results in visible defects like potholes, damaged road signs, defective street lights or traffic signals and weight limits on bridges. These defects are seen and felt by all and often put the council in the media spotlight.

- 2.2** The roads are vital to the economic, social and environmental wellbeing of our area. They provide access for business and communities, as well as contribute to the area's local character and our electorate's quality of life. Highways really do matter to people. Public opinion surveys continually highlight the high level of importance that our communities attach to the roads but dissatisfaction with the condition of local roads and the way they are maintained.
- 2.3** The current tough economic climate poses big challenges to councils to make the best use of limited resources in providing an acceptable highway service to the public, yet critically to maintain the integrity of our highways for future generations.
- 2.4** Public pressure can result in just short-term fixes, to potholes for example, rather than properly planned and implemented longer-term solutions. Short-term repairs provide poor value for money and often undermine the structural integrity of the asset.
- 2.5** HMEP is the Highways Maintenance Efficiency Programme, a Department for Transport funded and sector led transformation programme, which exists to support the highway sector on its journey to transform highway services. HMEP has prepared a guidance document on Highway Infrastructure Asset Management containing a list of recommendations considered so essential that non-compliance will reduce future grant income from the DfT through the Incentive Element of the LTP settlement
- 2.6** Highway infrastructure asset management is an established and widely recommended approach to highway maintenance. Asset management promotes a business-like way to make better use of limited resources and delivers efficient and effective highway maintenance. It takes a long term view of how highways may be managed, focusing on outcomes by ensuring that funds are spent on activities that prevent expensive short-term repairs. This makes the best use of public money whilst minimising the risk involved in investing in highway maintenance.
- 2.7** The Constituent councils of the West Yorkshire Combined Authority (WYCA) – including Kirklees Council, Leeds City Council, Bradford Metropolitan District Council, Calderdale Council, Wakefield Council with the inclusion of City of York Council, have developed an asset management framework as a basis for working together collaboratively to drive best practice through shared knowledge, experience and resources.

- 2.8** The WYCA Asset Management Framework reflects the guidance provided by the Highway Maintenance Efficiency Programme (HMEP) document 'Highway infrastructure Asset Management' and the National Code of Practice 'Well Maintained Highways'.
- 2.9** The attached asset management policy and strategy are elements within the framework that support best practice in asset management.
- 2.10** The Policy provides strategic direction and communicates the purpose in applying asset management to achieve the Authority's objectives. The Strategy sets out long term objectives for managing the Kirklees highway infrastructure in the context of the Authority's long term goals and objectives
- 2.11** In November Highway Authorities are required to submit a self-assessment questionnaire with supporting evidence to demonstrate they are delivering value for money in carrying out a cost effective maintenance service. This incorporates 22 questions on asset management, resilience, customer, benchmarking & efficiency and operational delivery. An essential part of the assessment is to have a published asset management policy and strategy.

3. Implications for the Council

Highways asset management can be delivered within existing legal, financial, human resources and information technology framework.

4. Consultees and their opinions

Officers have had discussions with political groups within the Council. They have noted the report and support approval by Cabinet.

5. Next steps

The asset management policy and strategy are high level documents that take a long term view and will only be updated when there is a change in policy or approach.

A Highway Infrastructure Asset Management Plan will be written to document the asset management process.

6. Officer recommendations and reasons

That Cabinet supports the approach to highways asset management and approves the policy and strategy for highway maintenance as set out in Appendix 1 of this report.

That authority is delegated to the Director of Place to keep policy under review and update as required, in consultation with the portfolio holders, if any change in policy or approach is required.

7. Cabinet portfolio holder recommendation

Cllr Steve Hall has discussed the report with officers and supports the approach to managing highways assets and officer recommendations and for the report to proceed to Cabinet.

8. Contact officer and relevant papers

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Appendix 1 to this report - Highway Asset Management Policy and Strategy Document including appendices

9. Assistant Director responsible

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10. Background Papers

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Appendix A – Highways Assets Managed by Kirklees Council

KIRKLEES COUNCIL

Highway Asset Management Policy and Strategy

1 Introduction

Kirklees Council recognises the importance of its highway infrastructure and how an effectively managed and maintained network contributes to the local economy and achievement of its corporate goals. We understand that effective asset management is a platform to deliver clarity around standards and levels of service, and to work collaboratively to make best use of available resources.

This “Highway Infrastructure Asset Management Policy and Strategy” sets out how the Council will best manage the highway network taking into consideration customer needs, local priorities, asset condition and best use of available resources. It presents the Council’s Strategy for the management of our highway assets as at September 2015 and allows planning over both the short and long term, whilst delivering a minimum whole life cost approach to our Highways Assets.

The highway infrastructure is the Council’s most valuable asset. The gross replacement cost, calculated in accordance with the requirements for Whole of Government Costs, is estimated to be £3.7billion (excluding the notional value of the land) and the current depreciation at £0.8billion

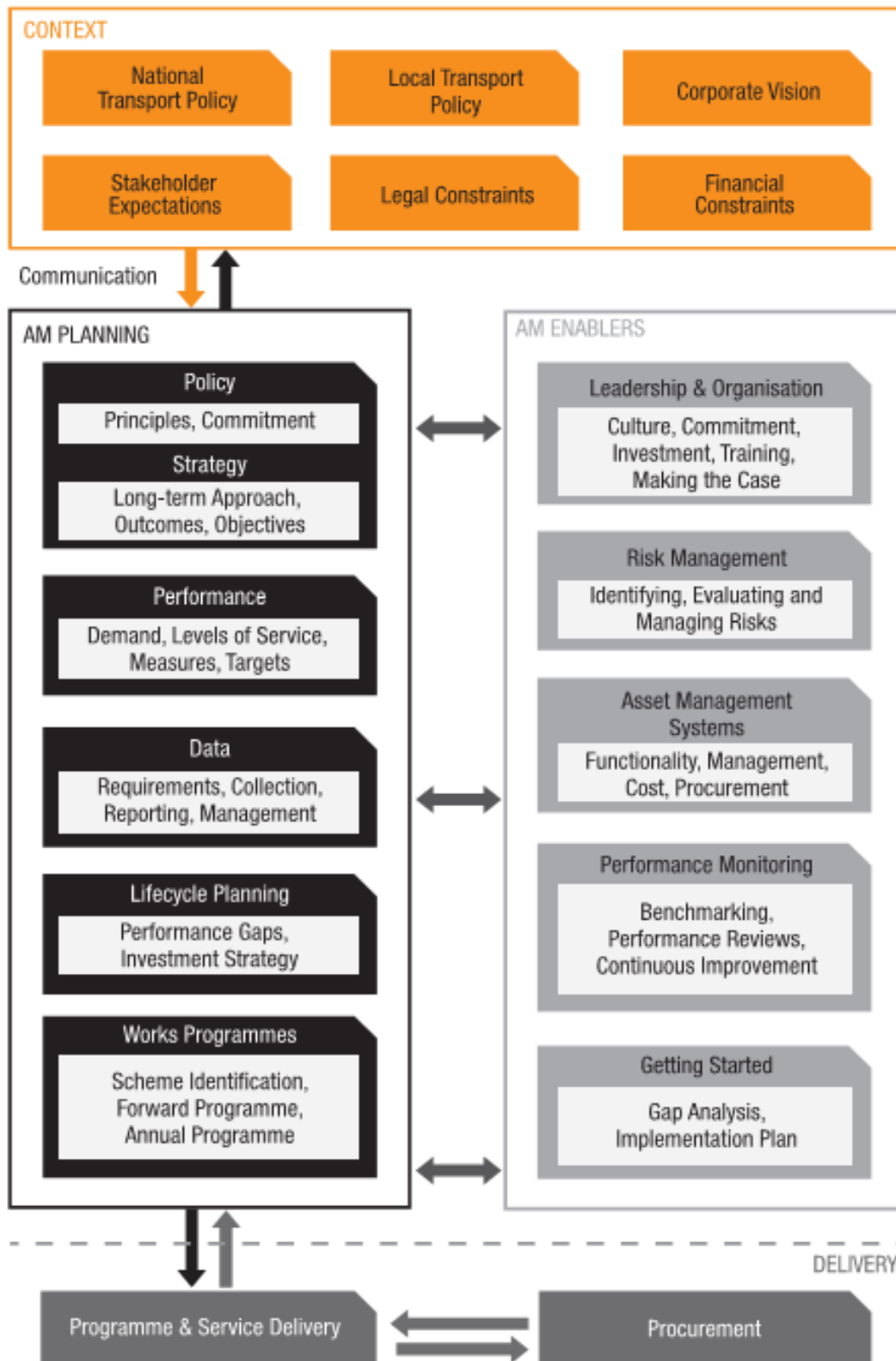
The infrastructure of the highway network is a matter of keen public interest and concern. This was established from the West Yorkshire Customer Satisfaction Transport Tracker Survey 2011. Local businesses and the public who tell us that road condition is very important and that the current condition is less than satisfactory

2 Highway Asset Management Framework

The Constituent councils of the West Yorkshire Combined Authority (WYCA) – Kirklees Council, Leeds City Council, Bradford Metropolitan District Council, Calderdale Council, Wakefield Council with the inclusion of City of York Council, henceforth referred to as the WYCA for simplicity have developed an asset management framework as a basis for working together collaboratively to drive best practice through shared knowledge, experience and resources.

The WYCA Asset Management Framework reflects the guidance provided by the Highway Maintenance Efficiency Programme (HMEP) document ‘Highway infrastructure Asset Management’ and the National Code of Practice ‘Well Maintained Highways’.

The national guidance on an asset management framework is shown diagrammatically in figure 1. The strategic documents needed to implement this framework are shown diagrammatically in figure 2.



(Highway Infrastructure Asset Management Guidance – UKRLG/HMEP, May 2013)

Figure 1 – Asset Management Framework

Kirklees Council – Highway Asset Management Policy and Strategy Document

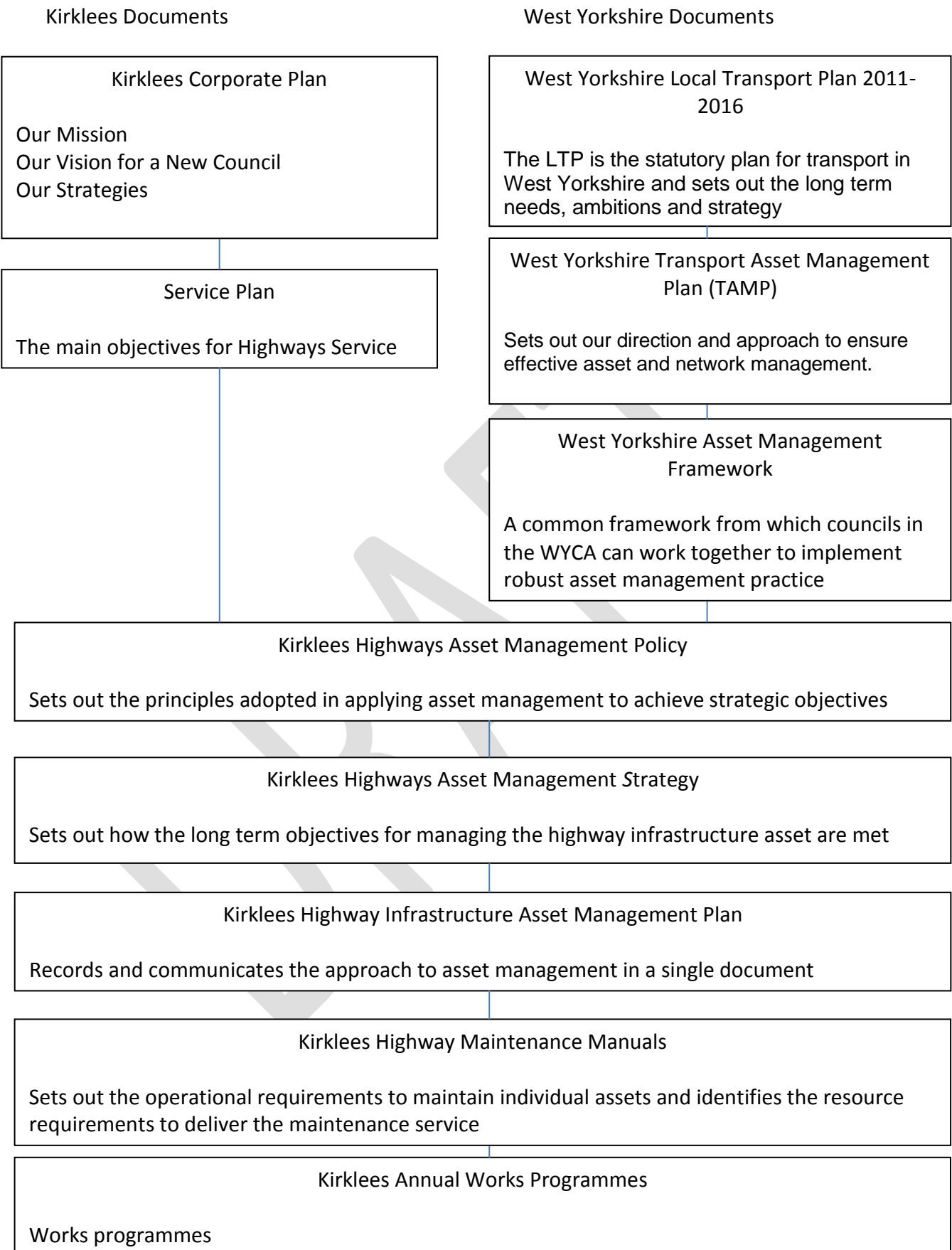


Figure 2 – Asset Management – Strategic Documents

3 Highway Asset Management Implementation Plan

Figure 3 represents the structure for the implementation of asset management for Kirklees within the WYCA context

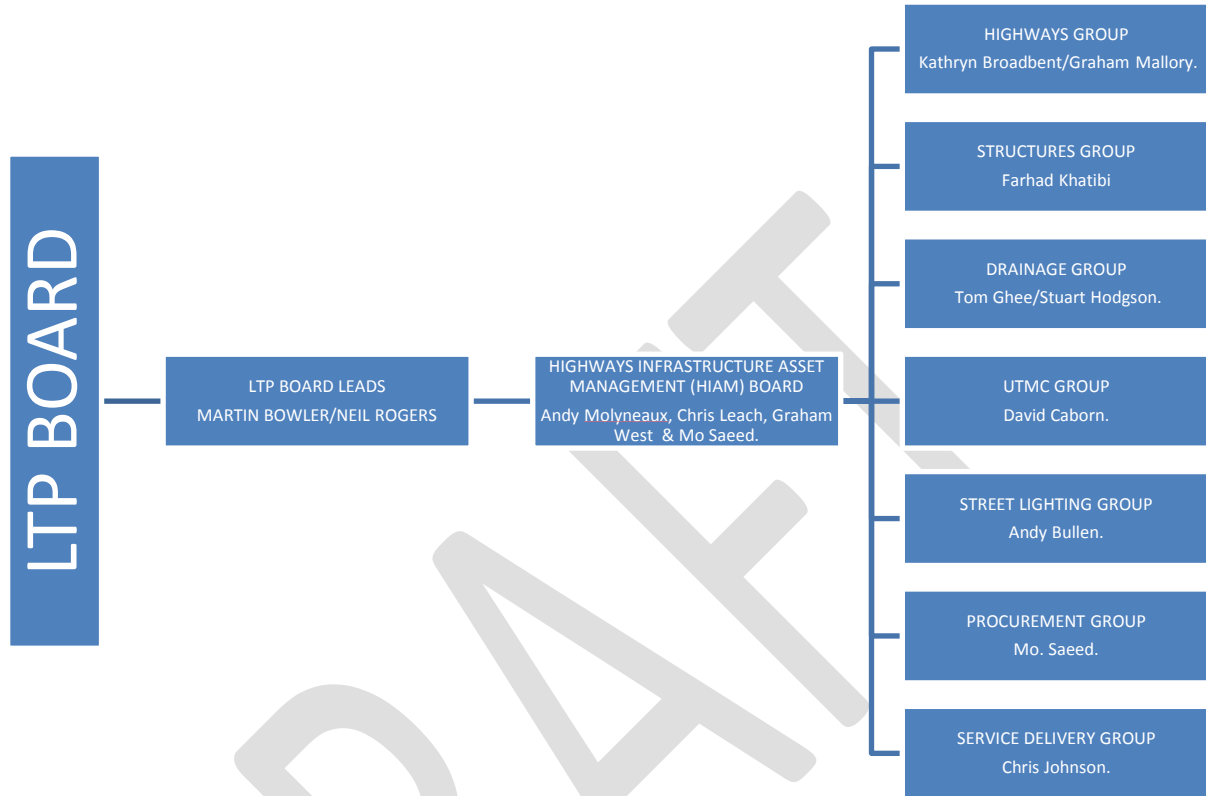


Figure 3 – Asset management Implementation Plan

4 Kirklees Corporate Plan

Our mission

Our mission is to be a modern, flexible and emotionally intelligent organisation able to work with our diverse communities to sustain the services they need, the outcomes we choose and the opportunities they want.

Our vision...

Our vision for the residents and communities of Kirklees is clear. We want Kirklees to be:

'A district which combines a strong, sustainable economy with a great quality of life - leading to thriving communities, growing businesses, high prosperity and low inequality where people enjoy better health throughout their lives.'

This is a Kirklees which innovates and creates new solutions through creative collaboration locally, regionally, nationally and internationally, to maximise the welfare of all our residents. A Kirklees which is positive and ambitious, confident in what we can achieve by connecting all of our strengths and harnessing all of our energies.

To deliver this vision in challenging economic circumstances means locally gathered evidence and insight will be paramount. We will need to use all of the resources available in our communities and to build positive, resilient communities that are able to do more for themselves and each other.

Our vision for a New Council

To deliver this vision for the communities of Kirklees, we must be clear about the type of council we need to be. Over the next three years, we will undertake a journey to become a radically ambitious, enabling council focused on the outcomes we achieve and the impact we make.

A council which...

- Connects ideas, people and resources across boundaries of all kinds, supporting communities to harness and build on their strengths.
- Focuses on creating trust and synergy between institutions, businesses and citizens in Kirklees.
- Continues to provide a consistent level of basic services, but will target limited resources as appropriate to meet community needs and strive to maximise the impact of all our services by collaborating with others.
- Safeguards vulnerable citizens, but wherever possible, seeks to not just provide a safety net, but also a route to help people control their own lives and to stay safe and well.

We have called this New Council.

Kirklees Economic Strategy Links

In pursuit of our vision for Kirklees to be recognised as the best place to do business in the north, and one where people prosper and flourish in all of our communities, the Kirklees Economic Strategy includes priorities that a well maintained highway can help to address.

Infrastructure: making it easier for businesses to succeed and for people to access work

Quality places: locations of choice for people, business and investment

Kirklees Joint Health and Wellbeing Strategy Links

No matter where they live, people in Kirklees live their lives confidently, in better health, for longer and experience less inequality.

A well maintained highway network contributes to the decent physical environment within a supportive community that is one of the differences we are trying to make for the people of Kirklees

5 Highway Asset Management Policy

The WYCA Asset Management Framework includes overarching policy statements, to provide strategic direction and communicate purpose in applying asset management to achieve each authority's objectives. These have been adopted as into a Kirklees Highway Asset Management Policy shown in figure 4.

The Asset management Policy is a high level document that confirms The Council's commitment to highways asset management and demonstrates how an asset management approach aligns with the Council's corporate vision and strategic objectives

Kirklees Highway Asset Management Policy

The Policy describes the principles adopted in applying asset management to achieve our strategic objectives

The Council recognises the vital role played by the local highway network in supporting the Authority's Corporate Planning Framework – Our Vision, Economic Strategy, Health and Wellbeing Strategy, The Corporate Plan and Service Delivery Plan.

The Council advocates an asset management approach for the maintenance of the local highway network in order to help deliver the best long term outcomes for local communities.

Issues

- A need to meet our statutory duty of maintaining a safe highway network.
- A need to contribute towards the delivery of the local authority and West Yorkshire Combined Authority corporate visions and objectives.
- Our Vision for a New Council
- A need to maintain the highway assets in an efficient a manner as possible to make the most of limited budgets.
- A need to meet the requirements of local businesses and the public who tell us that road condition is very important and that the current condition is less than satisfactory.

Objectives

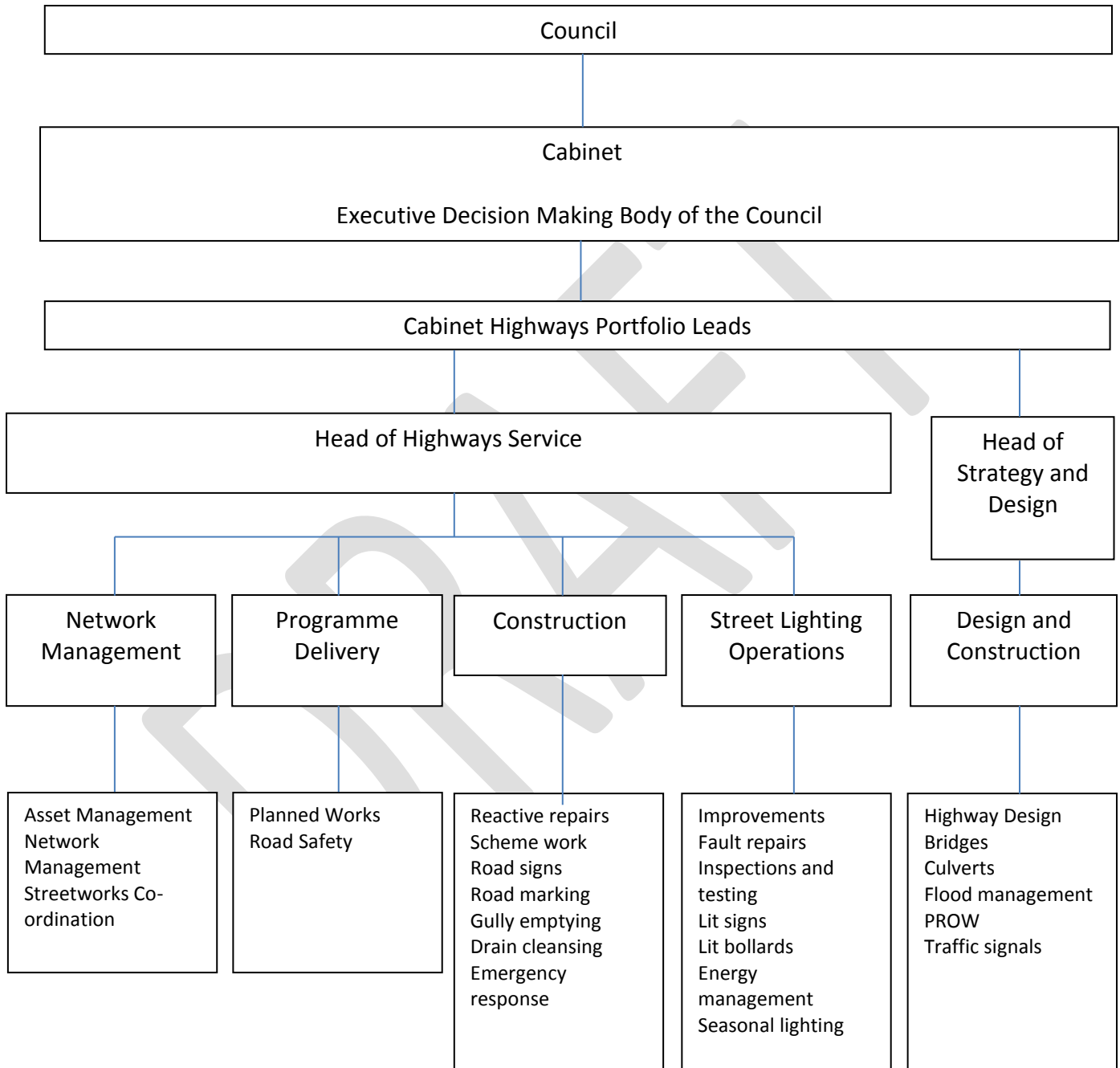
We will embrace asset management principles to

- Identify and agree realistic performance targets for the highway assets.
- Focus on investing in more planned preventative maintenance to minimise disruption, reduce third party claims and make available funds go further.
- Use whole life costing techniques to minimise the cost of asset ownership over the long-term.
- Adopt maintenance strategies that balance the priorities of the customer with the optimised use of available budgets.
- Use lifecycle planning techniques to understand the funding need of the highway assets.
- Make a compelling, evidence based business case to support internal and external funding bids.
- Provide key decision-makers with all of the information required to make those decisions with full knowledge of the associated impacts and consequences.
- Work collaboratively to explore, understand and implement best practice both internally through 'Champion Councils' and externally through industry engagement.

Figure 4 – Kirklees Highway Asset Management Policy

6 Service Delivery

The organisational structure of Kirklees highways operation delivers highway maintenance services through a number of teams



7 Highway Asset Management Strategy

This Highway Infrastructure Asset Management Strategy sets out long term objectives for managing the Kirklees highway infrastructure in the context of the Authority’s long term goals and objectives.

This Asset Management Strategy is one of the key strategic documents relating to the Council’s Highway Services. A key element of the Strategy is the Council’s Highway Infrastructure Asset Management Plan (HIAMP). This Plan contains approved policies and guidance, service standards and interventions in respect to the Council’s legal requirements and its service provision.

The core elements of the strategy are

- Inventory and data management
- Levels of service
- Lifecycle Planning, budget projection and valuation
- Risk management

Inventory and Data Management

An inventory of the highways asset is the foundation of the asset management system. Knowledge of the extent and the overall condition enables an overall view of need and a consistent approach

The highway asset has been divided into asset groups. Each group is then broken down into asset elements (See Appendix A).

Major Asset Group	Approximate Asset quantity
Carriageways including associated road markings and drainage infrastructure	1,900km
Footways and cycleways	2,333km
Street lights and illuminated signs	58,800units
Signal controlled crossings and junctions	227no
Structures	684no. plus 400km walls

Inspection and survey regimes for highways assets, particularly to inform national guidance and statutory requirement, provide us with good quality information on our major assets. The knowledge of the asset is not complete and where gaps exist a judgement is made on the cost / use / maintenance of asset data to determine the value in extending the inventory.

Data has been collected in several formats across various asset management platforms. It is proposed that data is consolidated as far as is practical to maximise effectiveness and drive the consistent approach. Much of the information is in a format that complements a GIS based platform.

Levels of Service

Within a strategy these are broad statements that describe the higher level corporate objectives and stakeholder requirements to be achieved from management of the asset from implementing asset management.

To provide a consistent level of basic service with limited resources targeted as appropriate to meet community needs

To strive to maximise the impact of our service by collaboration with others

To ensure early intervention to extend the life of the asset at optimum cost

Lifecycle Planning, Budget Projection and Valuation

In line with national guidance and good practice, Kirklees Council is developing a lifecycle planning approach to managing its highway maintenance activities.

Understanding how long specific maintenance treatments last, the relative cost of these treatments and the Levels of Service provided are essential pre-requisites to good asset management.

When considered alongside defined outcomes life cycle planning enables the development of investment strategy to deliver a defined level of performance, or where funding is constrained, to quantify the effect of funding scenarios on the levels of service that can be delivered. Life cycle planning for major asset groups will be detailed in the Highway Infrastructure Asset Management Plan.

HMEP has developed a life cycle planning toolkit that Kirklees will use to allow deterioration modelling for all all highways assets except structures where deterioration is the principal measure of performance.

Gross Replacement Cost and Depreciated Replacement Cost

Whole of Government Accounts (WGA) has set requirements for the way the value of the highway asset is reported to the HM Treasury in the Authority's audited accounts. When the WGA process has been fully implemented, authorities will be required to meet the strict requirements for financial reporting of their highway asset. For this to be achieved, there is clear need for accurate and detailed inventory information and performance data. This requirement will support asset management by providing an improved understanding of network deterioration and combining that with the levels of service to be achieved.

Risk Management

Successful implementation of the asset Management Framework requires a comprehensive understanding and assessment of the risks and consequences involved. Optimally the network would be operated at the lowest level of risk but as the financial demands of maintaining the network to that standard exceed the available budget it is important to understand to what risks the Council is exposed when making decisions on investment strategies, setting levels of service, and identifying engineering standards.

The Council's Risk management strategy defines the approach to managing risk across the Authority.

Deteriorating asset condition and reductions in funding are a high risk for the Authority within the risk matrix assessment

8 Highway Asset Management Planning

Inherent to this process is a need to understand the influence of budget decisions on customer satisfaction and delivery of the corporate priorities. Furthermore, the impact that investing on one asset element may have on the overall performance of other asset elements, as well as the whole asset, is examined.

The process to allocate maintenance budgets is shown in figure 5

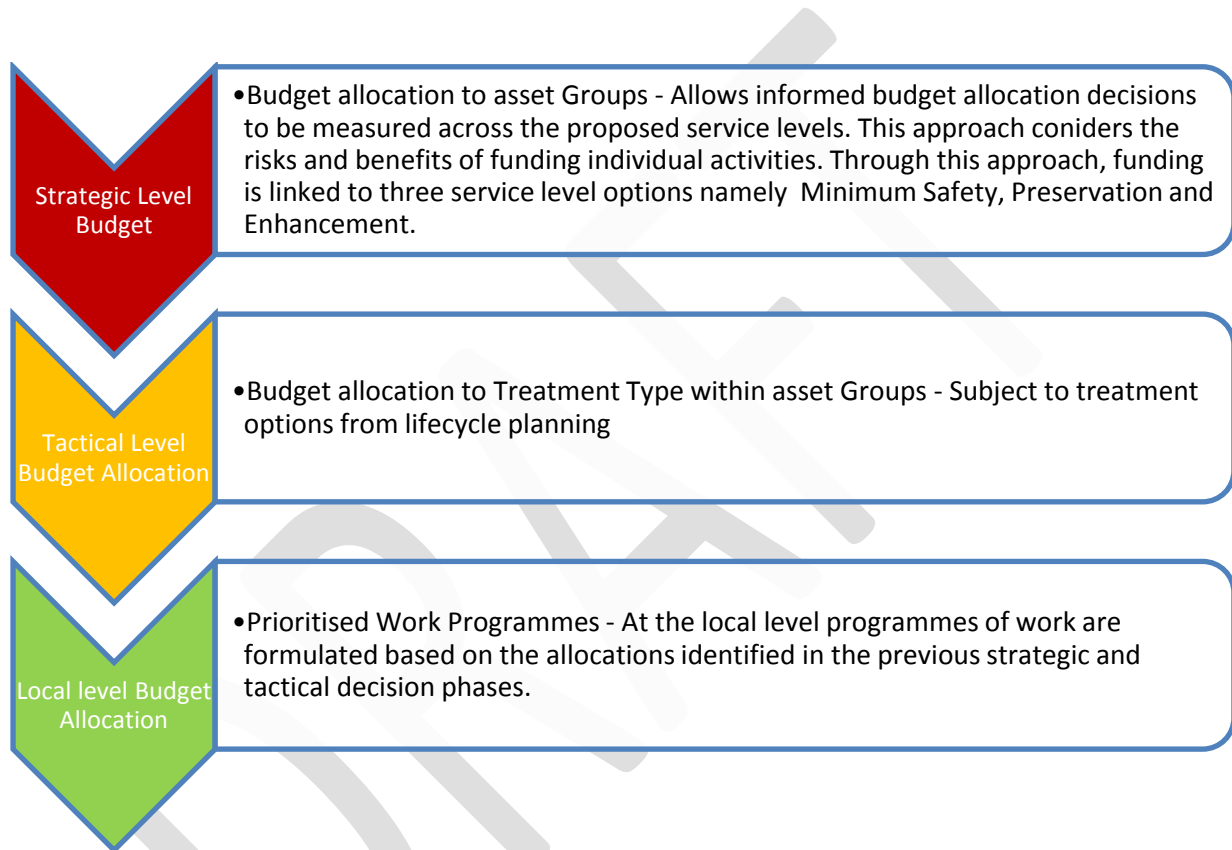


Figure 5 – Budget Allocation Process

9 Sudden Asset Failure

This Strategy advocates a planned and risk based approach to Asset Management, but there may be exceptional circumstances in which a particular asset fails rapidly, beyond prediction. In this event, programmes of work will be reprioritised across all asset groups in order to facilitate the inclusion of additional schemes.

10 New Works

One of the aims of good asset management is to improve co-ordination between highway improvement and highway maintenance schemes. Taking into account the cost and implications of maintaining the asset at the design stage will ensure that whole life costs of schemes are optimised. The Asset Management Strategy aims to raise awareness of this issue, in accordance with national guidance, by ensuring that any new infrastructure, with internal or external funding, has adopted the most appropriate design option and the most appropriate materials.

11 Benefits of the Asset management Strategy

Kirklees goal is to improve public satisfaction with its highway service whilst maintaining value for money and continuing to provide a safe highway network, in line with corporate priorities

The asset management strategy supports continual review and improvement of its processes and procedures, ensuring, as far as possible, that the standards identified in relevant legislation and codes of practice are adopted and that our customers receive a good and efficient service that reflects the resources available.

12 Review

The asset management policy and strategy are high level documents that take a long term view and will only be updated when there is a change in policy or approach.

Customer feedback has been through the West Yorkshire Customer Satisfaction Transport Tracker Survey 2011. Further consultation is planned using the National highways and transport network (NHT) survey from 2015 and the annual outcomes will be communicated to key stakeholders.

DRAFT

Appendix A:Highways Assets Managed by Kirklees Council

Major Asset Group	Asset Element	Asset Quantity	Asset Unit
Highways	Carriageways		
	Principal Roads	210	km
	Roads Connecting communities	240	km
	Unclassified Roads	1450	km
	Total	1900	km
Highways	Footways and Cycleways		
	Primary Walking Route	29	km
	Secondary Walking Route	65	km
	Link Footways	76	km
	Local Access Footways	2129	km
	Cycleways	34	km
	Total	2333	km
UTMC	Traffic Signal Installations		
	Traffic signal junctions	132	no.
	Puffin Crossing	90	no.
	Toucan Crossing	3	no.
	Wig Wag	2	no.
	Total	227	no.
Structures	Bridges and Other Highway Structures		
	Bridges (≥ 1.50m Span)	212	no.
	Tunnel	1	no.
	Retaining wall - estimate	400	km
	Footbridge	215	no.
	Culverts (≥ 1.50m Span)	94	no.
	Subway	8	no.
	Other Structures (mast arm, sign gantries etc)	11	no.
	Other Structures (≥ 1.50m Span) with partial liability (i.e. 3rd Party bridges/culverts carrying adopted highways)	143	no.
Street Lighting			
	Lighting Columns	50213	no.
	Illuminated Bollards	2061	no.
	Illuminated Signs	5466	no.
	Zebra Crossing	432	no.
	Feeder pillars	251	no.
	Refuge island beacons	285	no.
	Variable Message signs	12	no.
	Subway units	85	no.
	Total	58805	no.
Other Asset Group			
	Highway Drains - estimate	250	km
	Highway Gullies and connections	75653	no.
	Surface Water pumping station	1	no.
	Highway Trash Grilles	60	no.
	Road Signs	not measured	
	Road Restraint Systems (crash barriers)	not measured	

Pedestrian Guardrail	not measured	
Trees	not measured	
Verges - estimate	2,500,000	m2