

# **HIGHWAY INFRASTRUCTURE ASSET MANAGEMENT PLAN**

## **2. POLICY and STRATEGY**

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# 1 Introduction

## 1.1 Purpose

This document forms the City's Highway Infrastructure Asset Management Plan (HIAMP), and sets out the Council's approach for managing and maintaining the highway infrastructure assets and network, taking into account compliance with regulatory requirements, customer needs, local priorities, asset condition and best use of available resources. It notes current practice, future plans and aspirations to aid decision-making to provide:

- Agreed levels of service to users for the lowest cost
- Improvements in the condition of an asset
- Asset valuation
- Better judgement of risks involved.
- Options for the changes in investment that would be required in order to provide varied levels of performance.

## 1.2 Context

Hull City Council has a population of 257,710 based on 2019 estimates which is made up of 131,062 males and 128,716 females and covers an area of 71.45 sq km (27.59 sq miles). On the basis of Whole Government Accounting, the Council's highway infrastructure assets are valued at £1,429m (£4,841m including land); the Gross Replacement Cost to enable the build of the asset at today's prices whilst on the basis of Depreciated Replacement Cost for work required to bring the asset to a modern equivalent condition it is worth £1.249m (£4,662m, including land). These consist of a number of diverse assets, including over 745 km (463 miles) of adopted highway, 35,000 street lights, 2,500 illuminated signs, more than 39 km (24 miles) of Public Rights of Way, and nearly 400 highway and non highway structures. The most valuable elements by this method are carriageways at 67% and bridges and structures at 15% of the total value.

The Council has a statutory duty to maintain the highway assets and network in a condition to enable safe access and passage by the travelling public. These assets provide a vital contribution to the City's economic, social and recreational well being, and are required to meet the needs of users for many years to come. A high quality, safe and reliable road network is essential for bus passenger and freight services, encouraging more people to walk and cycle.

The City is continuing to face growth in travel demand along with an expectation for high standards of maintenance. The condition of the highway infrastructure continues to be a key issue for the community and a reputational one for the Council. It is, therefore, critical that these assets are safe, usable and provide a reasonable level of service to the community. Yet, poor and declining conditions are commonplace on roads, footways, signs and road markings contributing to:

- Increases in the future liabilities for maintenance
- Increases in congestion, emissions and reduction in air quality
- Increasing barriers to cycling and walking, and using these to reach public transport for onward travel

Effective management of the City's highway infrastructure assets plays an important role in meeting corporate aims and those of its residents and visitors. The Council is committed to the efficient management of the highway assets to make the best use of its available resources. It has been implementing its principles for a number of years to provide a consistent approach and formally adopted the Transport Asset Management Plan in 2013. One key element is the effective use of information and processes that deliver required outcomes through appropriate data analysis to support budget management planning.

Since 2013, there have been a number of national developments necessitating a review of the TAMP, including the:

- Opportunity to take account of the latest guidance to best practice including that produced by the Highways Maintenance Efficiency Programme (HMEP) which has refocused highway asset management at the same time renaming it "Highway Infrastructure Asset Management Plan" (HIAMP).
- Need to make the HIAMP more understandable for stakeholders and decision makers, especially those with less technical backgrounds or lacking highway maintenance expertise.
- Need to be able to demonstrate that the Council's overall approach to highway infrastructure asset management meets the Government's defined minimum standards of ranking for a "Band 2" authority to maximise the amount of highway capital funding that the Council can receive from the Government. This requirement will come into effect from January 2016 and will apply to funding received from financial year 2016/17 onwards. From late 2016 onwards, the Council will need to achieve "Band 3" in order to maximise the Government's highways capital funding.
- Need to account for the Department for Transport (DfT) Highway Maintenance Efficiency Programme (HEMP) and its December 2015 guidance for the Local Highway Maintenance Capital Funding Self Assessment Questionnaire requiring, the Council to have an Asset Management Policy and Strategy that has been published or reviewed within the last 24 months in order to qualify as a "Band 2" or better authority at the time of the assessment.
- Requirement for continuous improvement. The TAMP (now HIAMP) is intended to be a live or working document promoting continuous improvement and to be regularly updated.

This HIAMP presents the Council's policy and strategy for the management of the Council's highway assets as at March 2021, allowing planning for the longer term, informing future highway maintenance priorities and driven by asset condition data. It updates the TAMP and takes account of current legislation, national codes of practice and standards that provide guidance and requirements; for example, the Highways Act, 1980, Well-maintained Highways, Management of Highway

Structures, Well Lit Highways and the Management of Electronic Equipment. Additionally, the HIAMP provides a tactical document linking strategic plans, such as the City Plan and the Local Transport Plan that contain the overarching goals for Hull to the operational and programme delivery documents, like the Highway Maintenance Improvement Plan and the Street Lighting Strategy. Their relationship to the HIAMP is shown in Figure 1.1.

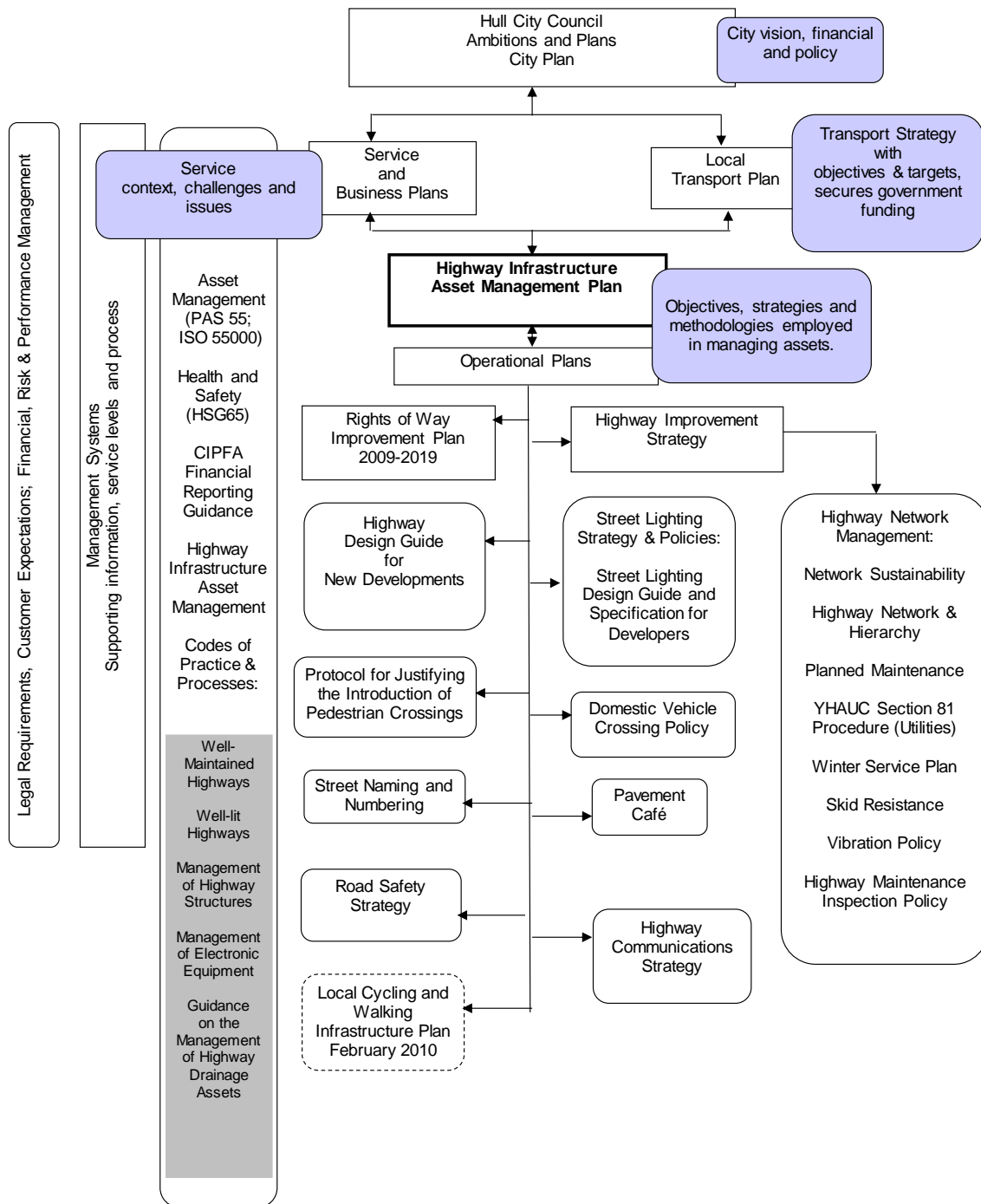
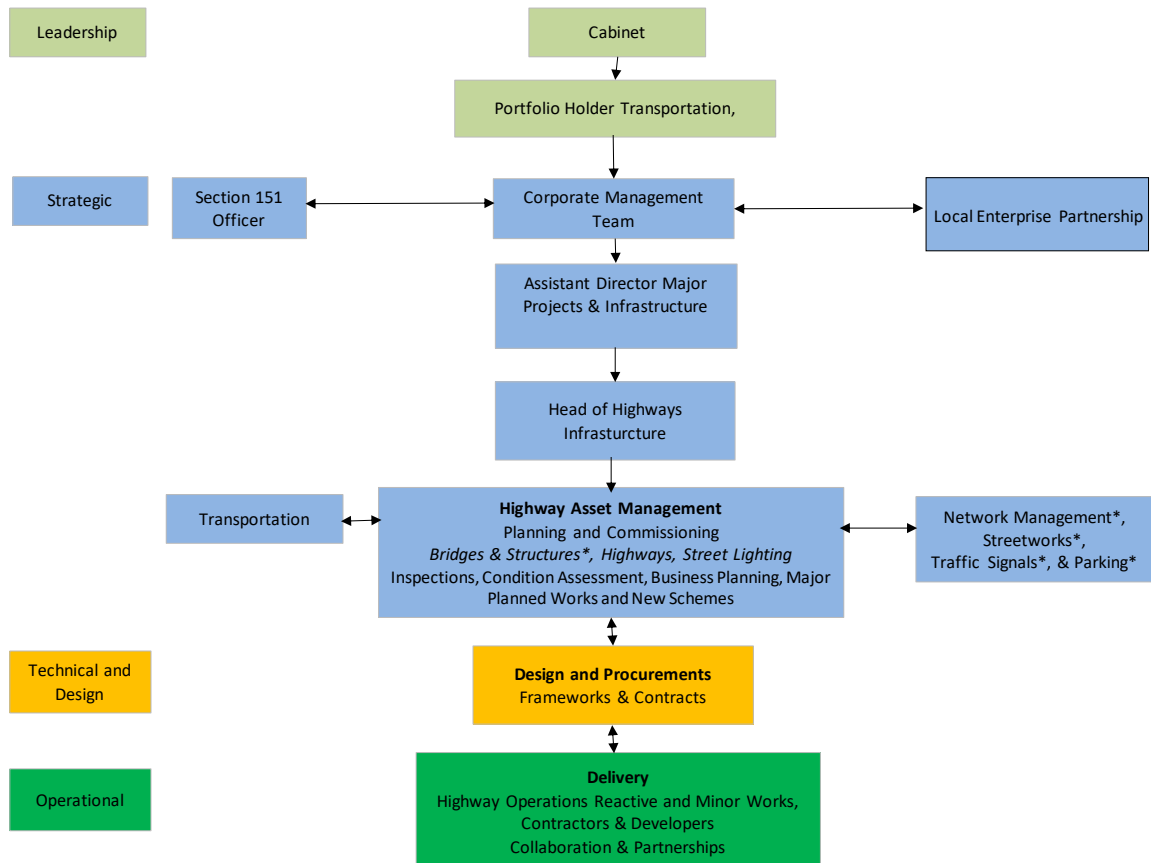


Figure 1.1 Policy Framework

Figure 1.2 shows that the Council’s organisational structure reflects the importance the highway assets and the required approach for service delivery, enabling clear direction, development and review through the Highway Asset Management Group within Streetscene Services. This group comprises 80 technical, professional and operational staff engaged in overseeing the carriageway and footways, bridges and structures and streetlighting, development and design of highway and traffic schemes, and operations for minor highway repairs and moving bridges.



\* Responsibility sits within Streetscene Service Area

**Figure 1.2 Organisational Structure**

Figure 1.3 shows the elements within a HIAMP which aim to manage and maintain highway infrastructure at a required level of service in the most cost effective manner for present and future users and to:

- Identify a detailed and up to date database of information about the type, location, number, size, and condition of the assets and their value.
- Explore cost effective maintenance treatments based on the whole life of the asset.
- Forecast the resources required to maintain the assets and various levels of service to inform decisions.
- Facilitate the development of forward works programmes
- Provide a framework for developing customer engagement strategies to assist in the setting of priorities.

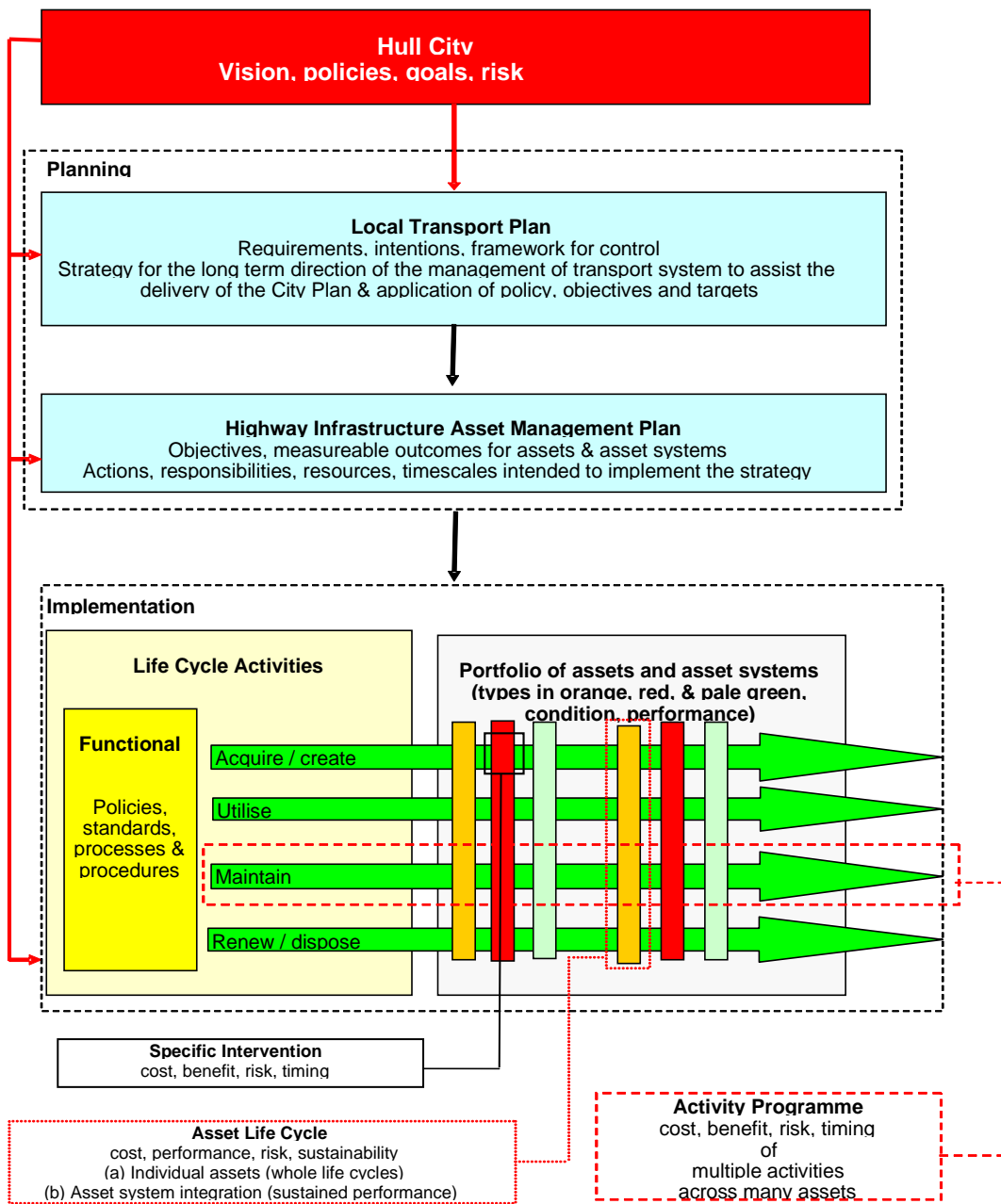


Figure 1.3 Elements of a Highway Infrastructure Asset Management Plan



## 2 Highway Infrastructure Asset Management Policy

### 2.1 Key Priorities

Hull City Council considers that effective asset management is the most cost effective way of delivering and maintaining a transport network that supports Hull's City Plan in particular, it supports two of the five key priorities which are to:

- **“Harness all Hull’s assets to become the leading UK Energy City** - Local businesses, agencies and communities will be trailblazers for producing and saving energy and reducing emissions – creating jobs, cutting the city’s carbon footprint and making Hull a sustainable city and UK hub for renewables and supporting the Council’s Environment and Climate Change Strategy (2010 – 2020).
- **Make Hull a world-class visitor destination** - Hull will be known across the UK and beyond for its unique heritage and culture, improving the vitality and vibrancy of the City, and making it a more desirable place to live, work and play. 2017 sees the city being UK City of Culture.

### 2.2 Objectives

In order to deliver the Council’s objectives the Highway Asset Management Policy aims to keep Hull moving, operate sustainably and support Hull’s future prosperity to:

- **Keep Hull moving:** The Council’s first priority is to provide and maintain an accessible, safe, efficient and resilient highway network for all who use it and this will continue. The effective management of the highway network and its condition is a key step in meeting this requirement. Inland and coastal flood mitigation is important to the City along with tackling congestion to reduce the impact on residents, business and economic performance. Flood risks are effectively managed, but the Council is aware that incidents on the A63 and A1033, which is outside of the Council’s control, have a major impact on the congestion of the Council’s highway network and there is need for greater co-ordination to alleviate it.
- **Operate sustainably:** The Council seeks to improve the condition of all highways and associated infrastructure and will prioritise its investment based on the understanding of current and future requirements to enable:
  - Sustained investment over the life of the asset by targeting treatments as these show signs of deterioration and before requiring costly repairs.
  - Reducing the need for reactive ‘temporary’ pothole repairs as a response to safety defects to enable improvements in condition as well as allowing extension to the useful life of a highway asset.

- Shift routine resources further towards preventative activities to improve resilience.
- Provide the support that enables routine maintenance work to be delivered locally by improving responses to complement the Council's programme of works
- Deliver value through efficiency savings.

Additionally, to create an environment that encourages walking and cycling, carbon reduction and energy saving. To this end the Council will consider the needs of pedestrians and cyclists in its investment decisions and endeavour to maintain the highway network to a standard that reduces problems for cyclist such as those caused by potholes, gully grates and edge of carriageway condition. Furthermore, the Council has invested £5,124,537 in upgrading to more energy efficient LED street lighting throughout the City. By January 2021 the LED replacement programme was completed with 33,000 street lights converted to LED. The Council will continue to develop and adopt sustainable solutions that minimise waste and landfill and reduce the Council's carbon footprint.

- **Support Hull's future prosperity:** The Council fully recognises the vital role transport plays in the city's economic future and will endeavour to maintain and improve access to education, employment, shops and visitor attractions.
- **Meet Customer Expectation:** The Council recognises that residents need to be better informed to reconcile public satisfaction with the approaches adopted for highway maintenance.

## **3 Highway Infrastructure Asset Management Strategy**

### **3.1 Context**

The highway asset management strategy is based on the framework outlined in section 1 which identifies the relationships and influences on highway asset management. The strategy informs priorities in the delivery planning process enabling the continual improvement in the management of the highway assets. It explains how the individual assets fit into the framework, describes implementation of the asset management and the tools used for meeting statutory obligations, stakeholder satisfaction, and the overall performance of highway infrastructure within the context of any constraints, such as funding.

In accordance with national guidance and good practice, the highway assets are divided into component groups and activities, then linked to funding to meet City Plan ambitions and transportation objectives, delivery planning and performance targets. Inherent in the process is the influence of budget decisions on corporate priorities, customer satisfaction and the impact of investment on each of the assets. To this end, investment approaches based on needs and life cycle have and are evolving linked to the durability and relative cost of treatments, levels of service, value for money and risk assessment whilst continuing to provide an accessible and safe highway infrastructure. Successful implementation of these approaches relies on a good understanding of the asset, its current and future performance, expenditure, and customer feedback. This requires current, accurate and robust data.

### **3.2 Major Assets**

The major assets that this HIAMP covers are:

- Carriageways and footways;
- Cycleways and paths;
- Highway bridges and structures;
- Street lighting;
- Street furniture;
- Traffic control devices (signals, signs etc);
- Trees and other soft estate

Appendix A provides further details. The categorisation of the assets allows a clear understanding of each asset allowing the linkage of expenditure with activities, performance monitoring, and continuous improvements within the constraints of available resources.

### **3.3 User Preferences**

There is an on-going customer interest in the condition of roads with results from the National Highways and Transportation (NHT) customer survey showing that the condition of roads in the item being “most important to users” and the aspect of being “in most need of improvement”. The data indicates a strong preference for

improvement in the carriageway (road) condition with 66% (down from 72% in 2014) of Hull residents surveyed in 2020 being dissatisfied the condition of roads compared to the national average of 64%.

### **3.4 Highway Asset Management Planning**

The Council conducts highway asset planning in line with the process shown mapped in Figure 3.1. Core elements are:

- Inventory and data management
- Levels of service
- Lifecycle planning, budget projections and valuations
- Risk Management.

Appendix B provides details of this practice with supporting data in Appendices C to F.

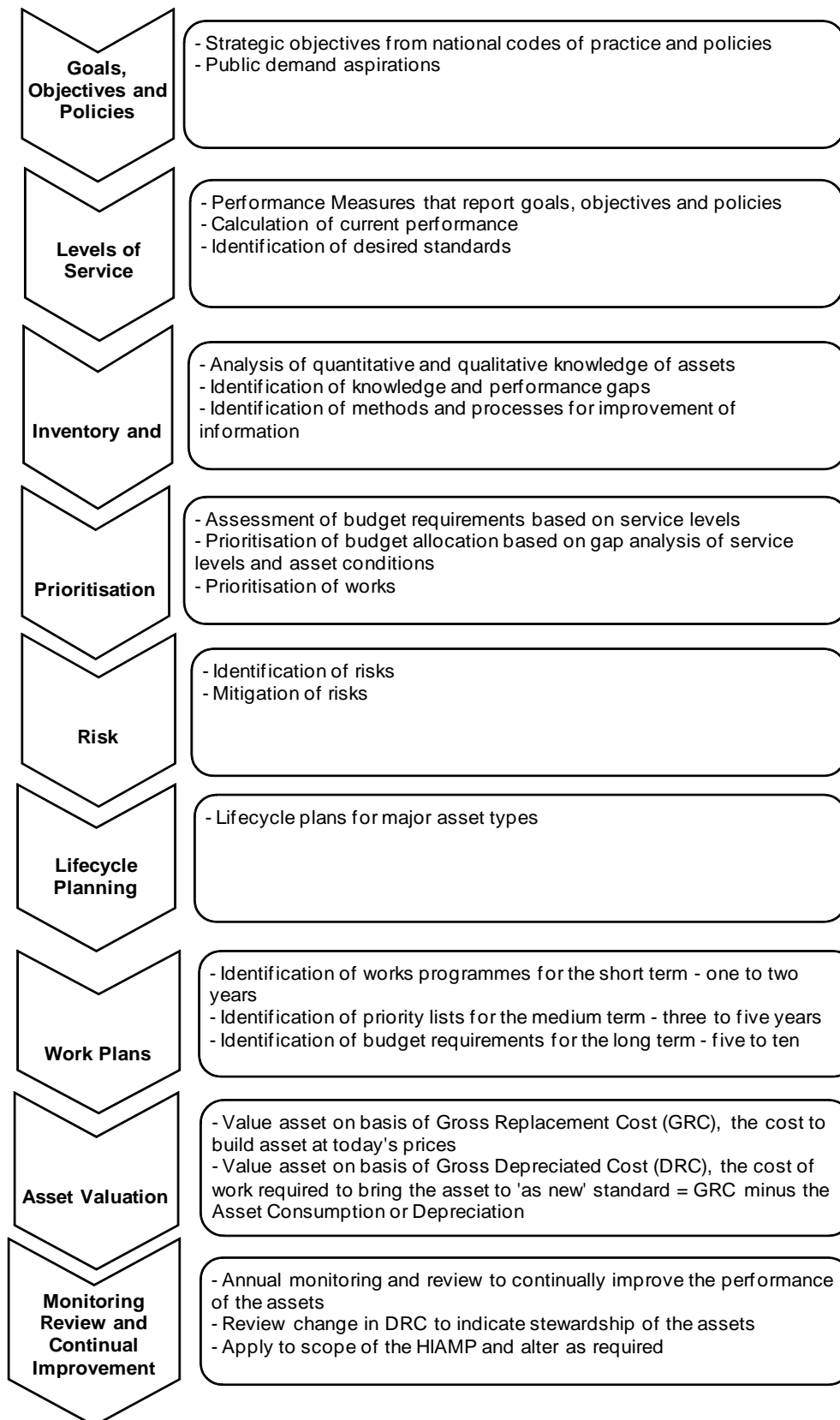
Major Projects and Infrastructure is responsible for the delivery and procurement of the carriageway and footway maintenance programme and technical assistance for the structural maintenance of these assets, the highway safety inspection programme and the commitment of reactive maintenance works to the highways operation team, and the replacement and improvement programme for street lighting. The bridges and structures asset maintenance then falls under the Street Scene Services team.

Significant value projects are procured using the YORhub frameworks for Yorkshire and Humber or other similar frameworks. These have been developed to provide an efficient, value-adding procurement solution across the region. Minor works are procured through the Councils Your Tender portal or via 3 quotes taking advantage of local contractors of varying size to deliver these projects quickly and efficiently. Works of a more specialist nature, plant and equipment are procured direct from specialist contractors by means of competitive quotations or open tender. Street lighting reactive and proactive maintenance works are delivered through Kingston Works Limited which is a Hull City Council wholly-owned company.

### **3.5 Strategy for the Main Asset Groups**

To deliver sustainable improvements in the overall condition of the highway, the group develop indicative forward work programmes aligned with the Government's Comprehensive Spending Review period with packages of works prepared annually, supporting the Council's finance team to meet financial reporting requirements under the Whole of Government Accounts (WGA). This allows the development of longer term planned maintenance and the formulation of programmes of work based on condition, resources, budget allocations and procurement of preventive treatments which have critical windows of opportunity of short duration, such as surface dressing. Broadly, this leads to the adoption of three maintenance approaches:

- Planned to replace or enhance
- Preventive to arrest deterioration and prolong the life cycle
- Reactive to maintain public safety.



**Figure 3.1 Asset Management Process**

Resources are further allocated to maintenance categories dependant on the road hierarchy and the Depreciated Replacement Cost of the entire portfolio of assets by prudent allocation with resources targeted to deliver the “right treatment, at the right time, in the right place” for a given budget allocation. This moves maintenance away from reactive towards more proactive or planned maintenance. The requirements for WGA will lead to future refinements of the service, including taking account the smaller assets and of the Council’s Emergency Plan Resilience Network. Investment in drainage maintenance and improvements will continue.

### 3.5.1 Carriageways and Footways

The user preference supported by the condition profiles give a clear direction for a focus on the carriageway and footway assets as a priority and identifies that a greater proportion of the available budget is directed towards carriageway and footways. Both these asset groups are in the greatest need of attention with the desired outcome to improve the overall condition and arrest the progressive decline.

Strategic objectives are best supported by a good principal road network so planned maintenance is initially aimed at the principal road network followed by the remaining classified road network. The aim is to keep the principal road network requiring maintenance below 2% and the non-principal classified road network below 3%. Appropriate proactive treatments are also programmed on the classified road network to seal up the surface resulting in the life cycle of the road being expanded by up to 8 years.

The Unclassified road network has now been split into 2 categories the unclassified distributor roads including all bus routes and industrial link roads (U1) and the remaining residential roads (U2). The U1 network is prioritised after the classified road network due to the lower levels of traffic but the treatments used are similar due to the existing construction. The residential roads are programmed using cost effective proactive treatment on a priority basis from a predetermined budget allocation.

With respect to footway maintenance, the strategy is to maintain footways and cycle tracks in a steady state, aiming to maintain current condition indicator results whilst continuing to repair safety defects.

It is intended to continue with a preventive approach by investing a greater proportion of the available budget to treat roads and paths earlier before full renewal is required. It is likely that a small element of revenue funded works will contribute to the overall condition, such as where significant areas of patching are undertaken.

The investigation and intervention levels for reactive repairs moved to a risk based approach in April 2019 in accordance with the Code of Practice and will determine more cost effective ways of repairing safety defects to an acceptable standard. The Council will continue to provide annual investment in drainage improvements through positive drainage systems to assist with managing flooding issues.

### 3.5.2 Highway Bridges and Structures

The current strategy is to maintain assets in a steady state, aiming to maintain or improve current condition indicator values whilst ensuring bridges and structures are safe to use and fit for purpose. Priority for investment will be to maintain safe structures and undertake a small number of strengthening projects based on statutory duties of inspections, management of abnormal loads and bridge usage. Structures with very poor/substandard condition or high risk to public safety are prioritised to reduce the risk of failures, either by more detailed inspections or strengthen/ repair works. Where bridges are found to be no longer capable of carrying the required vehicle loading: options considered include, monitoring, imposing a weight limit or a width restriction and strengthening. Extra account will be taken of several unique structures which may require extra attention, comprising 11 moving bridges, 26 nationally listed bridges and 90 nationally and locally listed statues and monuments.

### 3.5.3 Street Lighting and Illuminated Assets

The current strategy is to ensure that the illuminated street furniture is functioning correctly at all times, and that inspections and repairs are undertaken to faulty / damaged stock to timescales as specified in the maintenance contract; to invest in new energy efficient technologies, adopt dimming and trimming protocols on all new installations to control energy expenditure and reduce carbon footprint. The Council's street lighting management and maintenance is supported by an approved lighting policy which has seen over 97% of all lighting converted to LED technology. All new developments are required to include low energy LED lighting in the proposed designs for adoption. Columns are replaced based on a risk assessment and age and material profile as funds become available. All routine maintenance will continue to be undertaken to defined codes of practice and contract arrangements with delivery agent, Kingstown Works Ltd (KWL).

## **3.6 Improvement Schemes and New Works**

The strategy supports the policy for improving safety and economic growth and advocates the continuance of a co-ordinated approach to deliver improvement and maintenance schemes. There is an on-going requirement to ensure that the inventories are updated to reflect the installation of new assets.

## **3.7 Sudden Asset Failures**

To address exceptional circumstances of a rapid failure of an asset, planned activities will be re-prioritised across all asset groups to facilitate the inclusion of additional schemes.

### **3.8 Planning and Land Use Considerations**

Growth and redevelopment of parts of Hull impact on the existing highway assets and there is need to ensure that any new development or change of use promoted through the planning process takes this into consideration and references the Council's *Highway Design Guide for New Developments* and the *Street Lighting Design Guide and Specification for Developers*.

### **3.9 Data Management Strategy**

The Data Management Strategy (DMS) has been developed to identify the information held by the authority with regards to highway assets and the future data still required to ensure effective management. A clear understanding of what assets we have, what we need and their condition is essential to determine where our budget should be directed to achieve the most sustainable outcome. Good and robust data is seen as key to asset management with data needs, responsibilities, costs to collect, manage and maintain data, IT and reporting requirements being key.

To comply with national guidance the Strategy has been structured around six asset types and assesses the data available for each asset, where the information is held, and who maintains the data. The Strategy focuses primarily on the most significant assets where better information will prevent poor investment decisions.

Investment must be directed to where it will provide the greatest support for our Corporate Priorities and the objectives of the Local Transport Plan while incorporating best practice. The authority needs to improve the management of our highway asset information and record keeping and communicate this information between departments more effectively.

Investment in good asset management and data collection has already been beneficial, with the application of lifecycle planning to guide long term investment to increase effectiveness and value for money. Examples of this include the investment in an energy-saving street lighting programme to reduce annual energy costs.

#### **3.9.1 Implementing Effective Asset Management**

Hull City's transport network is used daily by the majority of the public and is fundamental to the economic, social and environmental wellbeing of the area. It helps to shape the quality of the Council and makes a key contribution to wider local authority priorities including supporting the economy, social inclusion, community, road safety, education, health and trade.

The DMS sets out our approach to providing the data essential to the delivery of the highway service. Through data-led management of the components of the highway asset, the Council intends to ensure that it has an appropriate understanding of the highway and facilitate the delivery of the required outcomes effectively and efficiently in a well-planned manner.



The DMS will provide data to support the LTP and the HIAMP and help to provide a well-managed, cost effective and high quality highway network. To achieve this objective the overarching aim of the Councils DMS is to record and maintain relevant and up-to-date information to ensure an effective well-managed highway network.

### 3.9.2 Data Management Objectives

This strategy serves as a basis for the development of detailed transport asset management planning and its implementation, including enabling the organisation, its technology and its processes to adapt to change and progressively improve through experience and learning.

To provide the required information the DMS will include the following process;

Identification of Business Needs,  
Identify Data Owner,  
Accessibility and Data Stamping,  
Data Collection and Updating,  
Data Disposal.

Business Needs – Data will be assessed to demonstrate how it supports the Corporate Priorities and objectives of the LTP and the HIAMP. A number of datasets are statutory requirements while others are good practice, the strategy will consider whether the data is statutory, necessary or desirable set against the resources available.

Data Owner – An owner for the data is required to be responsible for managing the data collected. Typically the data owner will be the relevant Asset Engineers who will report ultimately to the Asset Manager and the Asset Strategy Head of Service.

Accessibility and Data Stamping – The Council will ensure the protection of all information assets within their custody. In line with ICT Security Policy, officers will have access to information assets, systems and services in line with their current role.

Data Collection and Updating – The method of data collection will adopt the most cost effective method whilst ensuring accuracy, reliability and consistency of data. Frequency of data collection will be based on a risk based approach regarding the assets importance to the networks performance. The data owner will determine the procedure and frequency of collection, updating and implementation.

### 3.9.3 Existing Asset Data Storage and Management

The Council has structured the record of data is primarily street based and broken down into asset components. The Council has adopted the structure outlined by CIPFA, breaking assets down into asset components to cover the complete range of highway assets. The transport asset component types are carriageways, footways &

cycleways, structures, street lighting, street furniture, traffic management and highway land.

Component types are broad categories based on the general function of the component. These are then divided into Component Groups used to distinguish between component types that have a similar function. Asset attributes then define the underlying data of the individual asset such as address, condition, data recorded, geometric measurements etc.

For this purpose, the Council uses the following tools:

- Confirm an enterprise asset management system and database developed by Pitney Bowes, which is integrated on both desktop and mobile devices across the Council. Users are able to record new assets and log potential jobs and enquiries associated with a particular highway asset. The software has the ability to log, respond and action enquiries raised against assets. It is also used to plan cyclical inspections and maintenance activities. This highway management system covering street lighting, other illuminated assets, street works, network management, highway safety inspection and defect recording, reports and repairs
- Carriageway and footway inventory data recorded via surveys undertaken by Yotta and stored using their UKPMS accredited software system MARCHpms. Annual condition surveys are then undertaken by Yotta and WDM to give both detailed visual inspections and structural survey data for carriageway and footway condition. Data from the surveys is stored on the software and used to develop and map potential major highway schemes, pro-active maintenance sites and lifecycle planning.
- ARC GIS – corporate mapping system and highway and adoption records.
- Bridge Station – has been adopted as the Councils Bridges and Structures asset database, with condition data updated from detailed annual surveys.
- ParkMap – the council is in the process of incorporating all TRO information onto this system.
- Other systems – Traffic signals, collision data, trees, street furniture.

### **3.10 Maintainability**

The Council recognises the need to improve co-ordination between improvement and maintenance schemes to optimise the whole life scheme costs and works towards finding the most appropriate design options, equipment and materials to ensure sound investment options from either capital or revenue accounts.

### **3.11 Best Practice**

The Council is committed to sharing of knowledge, experience and adopting best practice and participates in national and regional conferences and workshops through the DFT, HMEP, CIPFA and ADEPT etc. Streetscene Services has joined the National Highways and Transport Customers Quality Cost Efficiency Network (NHT, CQC) for the purposes of benchmarking its performance with other local authorities and drive improvements to the Highway Maintenance Service. The foci of the Network are Customers, Quality and Cost and the Council's participation should enable it to measure the on-going cashable and non-cashable efficiencies that are being delivered by the Service. On-going competency training occurs throughout the service.

### **3.12 Performance Monitoring, Review and Improvement**

To track progress and facilitate decision-making the HIAMP will be monitored by collecting and analysing information on:

- Progress (service delivery) and process (management)
- Preliminary response to activities (knowledge, attitudes and practices)
- Reasons for any unexpected or adverse responses
- Financial matters (budget and expenditure).

Periodic reviews will share information and perspectives on progress, and identify management action that may be required, agree on who should take the required action, when and how with an assessment of the whole plan, its implementation and results against its objectives on the basis of efficiency, effectiveness, impact and sustainability.

The Council will continue to report on the quality of service provided by the highway infrastructure assets for the benefit of users, known as 'Levels of Service' categorised as:

- Condition Assessment – preservation of the physical integrity of the asset based on the:
  - Perceived condition as measured by user perception
  - Actual condition as determined by measurement and analysis of condition data.
- Demand Aspirations – the service delivered by the asset in terms of use based on the users view on, and satisfaction with the assets and related services, gathered annually from opinion polls.

The Council's levels of service vary by asset group and will continue to include elements relating to:

- Safety
- Accessibility
- Economic
- Environment
- Demand
- Asset condition

### 3.12.1 Monitoring

The performance of the assets is monitored by appropriate auditing in accordance with set standards to address the status of an asset, trends, changes, compliance and effectiveness and is set out in Appendix C.

Each level of service can be delivered to varying standards depending on the investment provided. These are judged using the terms of excellent, good, fair and poor to reflect these standards with fair indicating a minimum level of service. Appendices C1 and C2 highlight the performance indicators and reveal:

- Relevant national single list indicators required by Government for annual data reporting including the condition of the classified road network, bridge condition and bridge inspection. These reflect achievements and outcomes over time and are considered to be robust measures
- Performance measures recommended in the relevant codes of practice
- National Highways and Transport (NHT) Public Satisfaction Survey Key Benchmarking Indicators (KBI)
- NHT Customer Quality Cost (CQC) Efficiency Network benchmarking.
- Local Performance Indicators (LPO) determined by the service area considered important by the City Manager Streetscene to measure business success.

The Council acknowledges that some performance measures that are recommended in codes of practice are not yet measured in Hull and that for some assets performance measures have yet to be developed.

### 3.12.2 Review

The Council will publish this Asset Management Policy and the associated Strategy. Additionally, following best practice guidance, and in the interests of continuous improvement the Council will incorporate performance measures as these evolve or develop into future updates of the HIAMP or its appendices. The performance monitoring and reporting will be used to review the plan and its processes, such as the quarterly quality management review. Activities will include:

- On-going examination of results, the factors contributing to performance and the options for dealing with poor performance.
- An annual review to update the DRC to indicate stewardship of the asset.

- Significant review every two years.

### 3.12.3 Improvement

The preparation of this HIAMP enables a series of key improvements to be identified to advance management of the highway infrastructure assets. To maintain focus on outcomes these are collated into an Improvement Plan shown at Appendix G.