



Hampshire  
County Council

# Highways Asset Management Strategy

## Version Control

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## 1 Introduction

- 1.1 Hampshire County Council recognises the importance of highway infrastructure in the context of the well being of all who use it. The County Council is committed to the good management of the highway asset not only for now but for future generations and recognises that asset management provides the right approach for efficient management of the network to deliver the required levels of service.
- 1.2 Hampshire has therefore been developing and implementing highway asset management principles over a number of years. A Transport Asset Management Plan (TAMP) was drafted in 2005, linking various key documents to provide a consistent and uniform approach to the management of the highway infrastructure. Hampshire's first Highway Asset Management Policy and Strategy documents were approved by the Executive Member and issued in 2011 and became key to embedding highway asset management principles. In 2013 the Highway Infrastructure Asset Management Guidance (HIAMG) endorsed this approach and presented it as a best practice case study in the Guidance. Since then the documents have been regularly reviewed and updated in line with national guidance and good practice.
- 1.3 Hampshire's asset management approach gives priority to managing and maintaining asset information, promoting its effective use and developing processes that deliver required outcomes, through the use of appropriate tools. The information, systems and processes in place are used to support investment decisions and help to set levels of service, performance targets and manage risk.

## 2 Implementing Effective Highway Asset Management

- 2.1 This Asset Management Strategy sets out how the Department's Asset Management Policy is being achieved. In particular, it describes how Hampshire continues to work towards implementing an asset management approach for our highway network and services. It provides the framework for delivering our corporate priorities through effective, informed and evidence based decision making. This document outlines Hampshire's approach to Highway Asset Management:
  - Providing a strategic overview and quick reference for senior management, elected members and the public.
  - Identifying the AM principles that Hampshire are progressing and their alignment to national guidance and the drivers that are influencing those principles.
  - Providing links to supporting documents, processes, and procedures.
- 2.2 This document identifies the processes and procedures that Hampshire apply to embed asset management principles throughout the highway and transport service. The Highway Asset Management Policy and Strategy and wider range of asset management processes and procedures documents form Hampshire's overarching Highway Infrastructure Asset Management Plan (HIAMP).

- 2.3 The Asset Management Strategy incorporates and is linked to a number of key documents, as listed below in Table 1. These documents facilitate and inform the asset management approach for Highway Infrastructure and support the delivery of the desired levels of service.

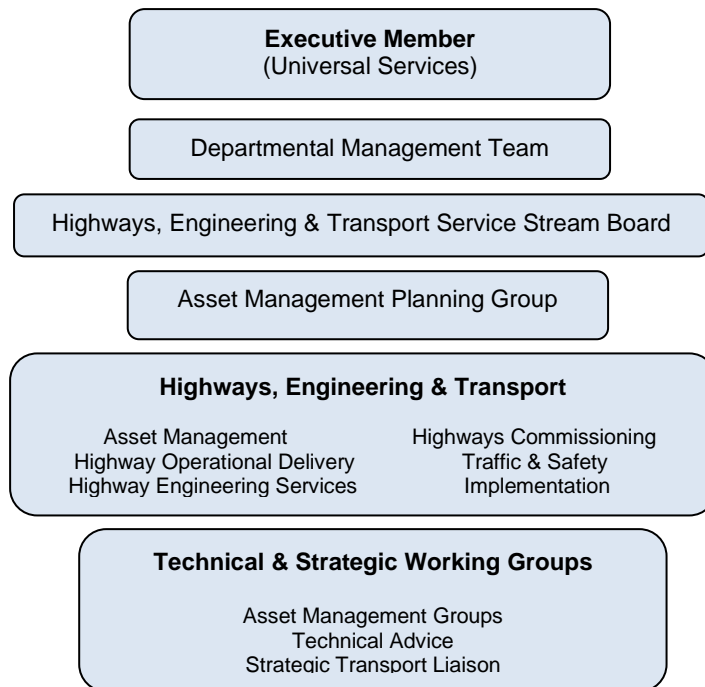
| <b>National</b>   | <b>Hampshire</b>   |
|---|--|
| Well Managed Highway Infrastructure: Code of Practice (2016)          | Highway Maintenance Management Plan (HMMP)   |
| CIPFA Highway Infrastructure Code                                     | Local Transport Plan 3   |
| PAS 55 / ISO 55000  | Approach to Service Delivery Planning  |
| County Surveyors Society (CSS) Framework for Highway Asset Management | Performance Management Framework (PMF)   |
| HMEP Maintaining a Vital Asset  | Corporate Strategy   |
| UK Roads Board quick start documents                                  | NBB process and lifecycle planning tools: including strategic, tactical and local. |
| Highway Infrastructure Asset Management Guidance (HIAMG) May 2013     | Traffic Management Policy Guidance (TMPG)  |
| HMEP Good Practice Guides - various                                   | Asset Management Data and Information Strategy                                     |
|   | Approach to Risk Management  |
|   | Approach to Performance Management   |
|   | Asset Management Policy  |
|   | Highway Asset Management Communications Strategy                                   |
|   | Climate Change Strategy  |

Table 1: Supporting Documentation

### 3 The Asset Management Framework in Hampshire

- 3.1 This Asset Management (AM) Strategy sits within the wider asset management framework (*figure 2*) and is one of the key strategic documents related to the delivery of the Council's highway services.
- 3.2 Encompassed within the AM framework are two key documents; the Council's Highway Maintenance Management Plan (HMMP) and the Traffic Management Policy Guidance (TMPG). Both contain the approved and adopted policies and policy guidance in respect to the Council's legal requirements and its service provision. These documents reflect the guidance set down in the national Code of Practice. The original strategy was based on the Code of Practice 'Well-maintained Highways'. This Code was superseded in October 2016 with 'Well-Managed Highway Infrastructure: A Code of Practice'. This strategy is aligned to the October 2016 Code focussing on a 'Risk Based Approach' with supporting evidence to key elements of the highway service, see section 9.
- 3.3 The Universal Services Directorate has set up an organisational structure that reflects the importance asset management plays in the delivery of highway and transport

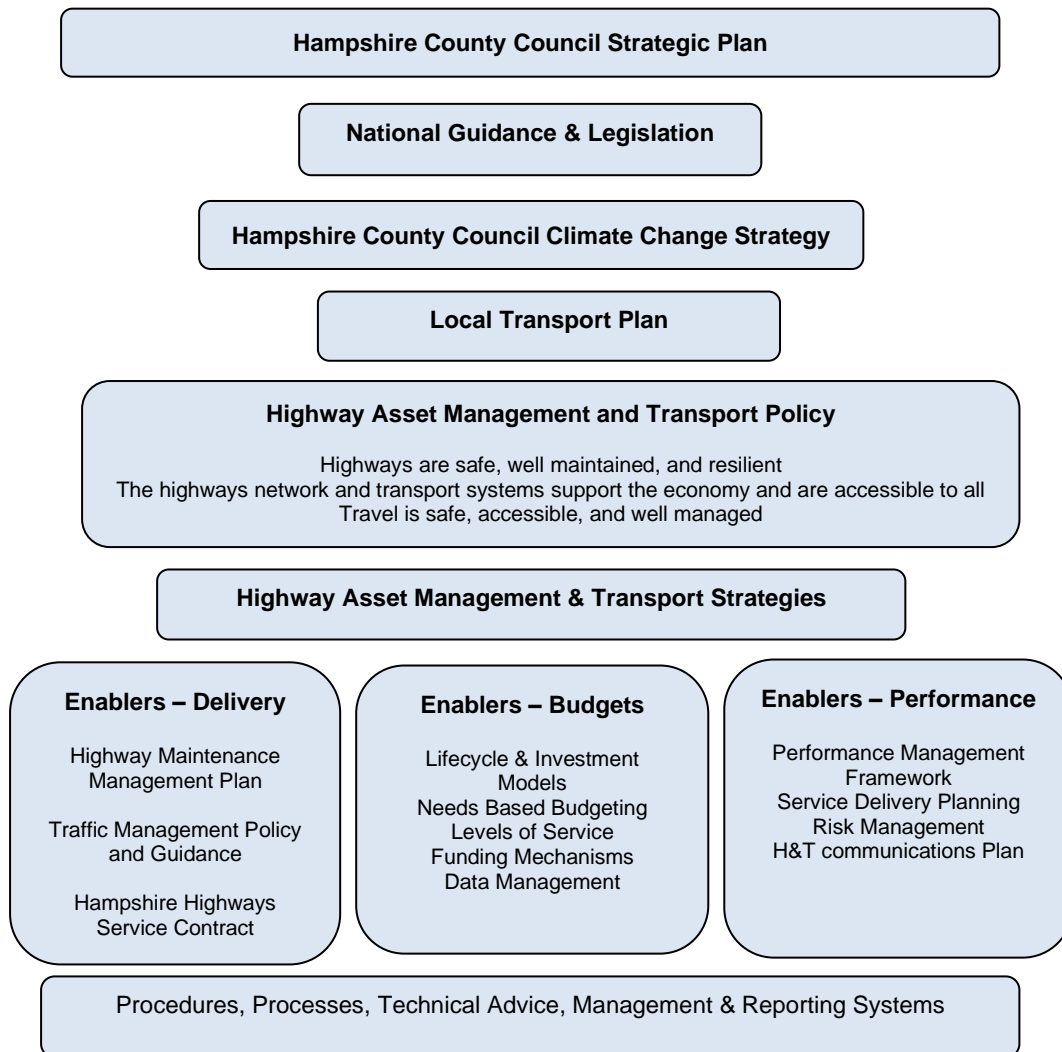
services. This structure enables; the development, continual review and the embedding and promotion of asset management best practice, described in Figure 1.



*Figure 1: Organisational Structure*

- 3.4 The implementation and management of this strategy is the responsibility of The Asset Management Planning Group (AMPG), whose role is to develop, embed and provide direction for the continuous improvement of asset management practices within the Highways, Engineering and Implementation Service Stream. The aim of the Asset Management Team (AMT) is to support the AMPG in promoting the principles of asset management by implementing the Group's associated improvement actions.
- 3.5 This strategy serves as a basis for the development of detailed asset management planning and its implementation, including enabling the organisation, its technology and its processes to adapt to change. It is based on the framework shown schematically in Figure 2 and outlined in the following sections. The framework identifies the relationships between asset management, the influences of corporate and national drivers and the influences of delivery, budget and performance. The Asset Management Strategy informs priorities in the delivery planning process and therefore supports continual improvement in the management of the highway asset.

**Figure 2: Asset Management Framework**



3.6 The framework can be presented in greater detail to illustrate the roles and relationships of groups and teams throughout the department and the Authority, see figure 3 below 'Delivering Hampshire Highways Asset Management.

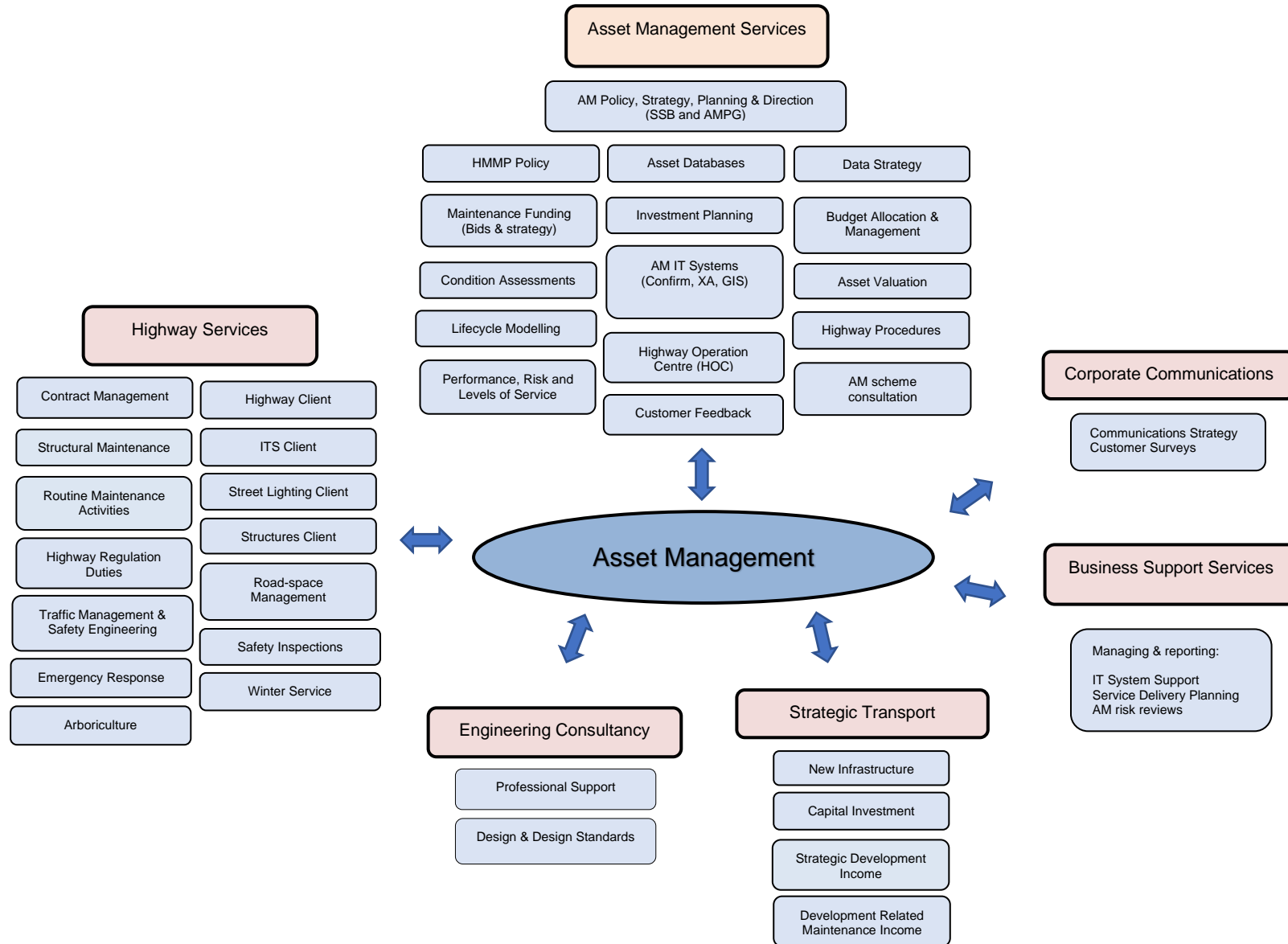


Figure 3: Delivering Hampshire Highways Asset Management Framework



- 3.7 This strategy explains how asset management processes and procedures are developed and implemented in the Department and provides a link to other key documents in the Asset Management Framework. It describes how continuous improvement to a highway asset management approach will be embedded using national guidance and best practice.
- 3.8 This strategy covers all maintenance led activities from capital and revenue funding sources. Processes to review all new infrastructure proposals are in place. These ensure that technical guidance, specifications, and standards are applied appropriately so that new infrastructure meets its identified aims and objectives whilst minimising whole life costs and the impact on future maintenance.

## 4 Asset Management Objectives

- 4.1 It is important to translate and link Hampshire County Council's Strategic Plan outcomes with highway, transportation and climate change aims objectives.

Hampshire's highway asset management objectives translate the corporate aims and objectives into asset management terms and these in turn inform the direction for asset management.

The objectives described provide direction for performance management, management of risk, decisions on asset data and information, service delivery, budget allocation and investment planning.

The AM objectives are:

- Safety:** To provide a safe network where accidents and injuries to road users are kept to a minimum.
- Condition:** To monitor and maintain network condition and deliver long term solutions.
- Accessibility:** To maintain and where possible improve accessibility for all by minimising disruption and avoiding restrictions on the network.
- Customers:** To provide customers with accurate and prompt responses to all enquiries and highway related services.
- Value for Money:** To continue to improve highway asset management practices and use our limited resources efficiently
- Sustainability:** To promote the use of more sustainable materials, and implement processes that reduce the carbon footprint of the highway service

- 4.2 To further enable the decision making process, Hampshire's highway asset has been divided into key asset groups, assets and components, maintenance responsibilities and related activities. This approach has been in place for many years, but it is continually refined to improve our works ordering and budget management processes with the service provider.

Dividing the asset into component parts and identifying the relative costs and demand for planned, routine and reactive maintenance activities is considered an essential process to achieve continuous improvement in Hampshire's approach to asset management.

- 4.3 Asset data is key to supporting any decisions relating to funding and provides essential information for delivering service efficiencies. Continuously improving data collection and data management processes continues to be a key objective, see section 9.

## 5 Funding, Budget Allocation and Service Delivery

- 5.1 As mentioned the highway asset has been divided into asset groups, components and activities. This detailed breakdown facilitates a budget allocation process based on an individual assets' needs which is then aggregated to provide funding across all assets and activities.

- 5.2 Inherent to this process is a need to understand the influence of budget decisions on all aspects of the asset, both the physical needs and the needs of those who use it. All those needs and the impact of investment decisions is important. The influences on funding include include:

- Strategic Transport objectives (Local Transport Plan)
- Climate Change Strategy and Action Plan
- Investment and service delivery planning
- Performance measures, targets and levels of service
- Key risks to the service (strategic and operational)

- 5.3 This approach relates to all highway maintenance budget allocation decisions and is supported using proprietary lifecycle management tools for the major assets.

- 5.4 The adoption of a lifecycle 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 (LoS) provided are essential pre-requisites to good asset management. Hampshire's 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.

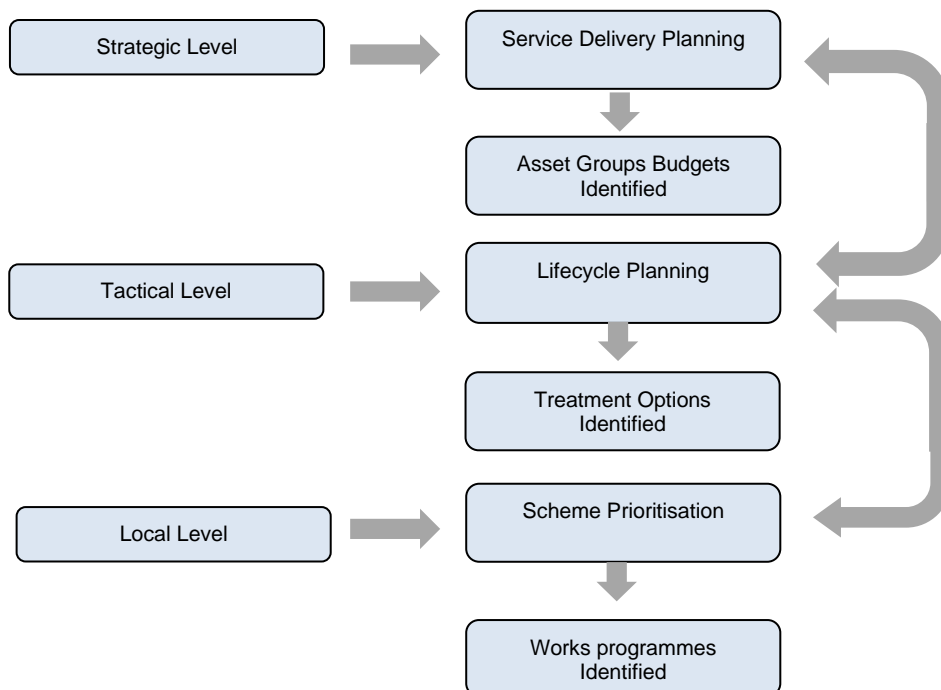
- 5.5 The scope and depth of information used to support funding decisions will vary dependent on a number of factors, including:

- importance, (safety, hierarchy)
- asset value and size

- age
- condition, deterioration and life expectancy
- customer led requirements etc.

The asset management objectives and the risk and performance management frameworks provide the evidence to support and inform service delivery planning.

- 5.6 This understanding can only be achieved through reliable, current and robust data. Hampshire has developed data and information strategies, which prioritises its data collection needs, data management requirements and the IT infrastructure necessary to process and present this information, (see Section 7).
- 5.7 By applying the principles described above, Hampshire has developed a Needs Based Budgeting (NBB) process to inform budget decisions at strategic, tactical and local levels, illustrated and explained in Figure 5 below.



*Figure 5: Budget Allocation Process*

This approach allows a consistent budget allocation process and relates high level aspirations to scheme level decisions.

At the **strategic level** illustrated in 6.2, information is gathered from the service delivery planning process. A Highways Cross Asset Investment Plan has been developed that uses lifecycle model outputs and performance management targets to provide information for senior decision makers to determine headline budget allocations across asset groups.

The approach is evidence based and relates corporate objectives to asset management objectives. It allows decision makers to assess the impact of different investment options and enables targeted investment and informed decisions by identifying the level of service that can be achieved for a given budget allocation.

The methods employed to deliver **tactical level and local level** decisions vary. For major assets, such as carriageways, footways, structures and ITS, proprietary toolkits with deterioration modelling built into them are used to develop investment options and ultimately maintenance programmes. For smaller or less valuable assets, less sophisticated tools are employed. This may include a combination of lifecycle assumptions based on inventory data, condition and hierarchy. These methods identify the relative maintenance needs of an asset component and provide options which relate to specific budgets and outcomes. However other information including customer feedback, local issues or constraints and engineering judgement will inform and prioritise the final work programmes.

- 5.8 Once the budgets for the routine, reactive and structural elements have been approved, the work is then delivered, within the following management structures.

#### Highway Asset

The routine and reactive highway services, are delivered by the Highways Delivery teams. The delivery of planned structural maintenance is managed by the Highways HQ Commissioning team who lead and support all aspects of Asset Management and administer the Hampshire Highways Service Contract.

#### Structures and ITS Assets

Are managed by specialist Client teams who oversee all routine, reactive and structural maintenance duties. They are responsible for maintaining their asset data. To ensure asset management continuity, these teams are represented on the AMPG and work closely with the AMT to ensure data and lifecycle projections for budget allocation are current.

#### Street Lighting

Is managed by a PFI team and is separate from the above asset funding stream and maintenance arrangements.

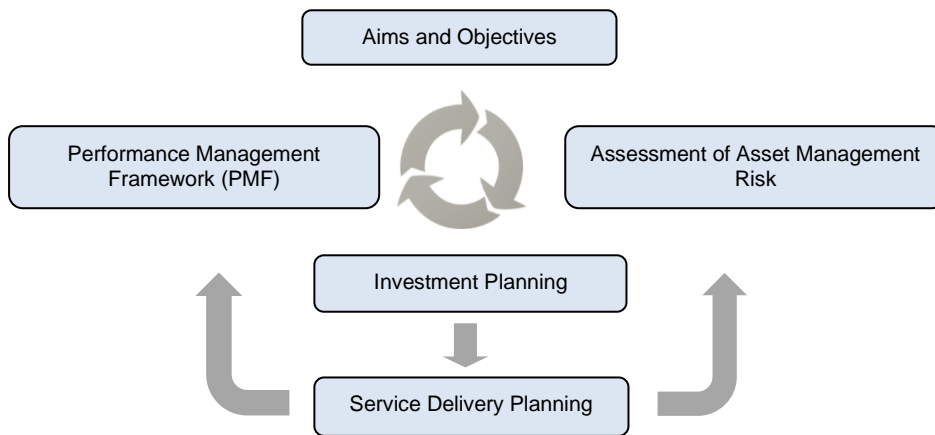
## 6 Asset Management Planning

### 6.1 Process and Procedure

The Asset Management Strategy supports continual review and improvement of highway policy guidance, processes and procedures ensuring, as far as possible, that the standards identified in relevant legislation and codes of practice are adopted, see Hampshire's Highway Management Maintenance Plan (HMMP) and Traffic Management Plan (TMP) for further details. This provides our customers with clear and concise information regarding the service that can be expected and the roles, responsibilities, and duties that the Highway Authority is required to fulfil.

### 6.2 Performance, Risk and Service Delivery Planning

To assist and inform the asset management planning process a Performance and Risk Management Framework has been developed. This framework connects strategic aims to a set of targets and measures. It identifies key risks and informs service delivery planning, allowing projects and programme resources to be allocated, reflecting the strategic aims of the service, see Figure 4 below.



*Figure 4: Service Delivery Planning Process*

Hampshire currently has 18 strategic measures relating to the asset management objectives of: Safety, Condition, Accessibility, Customers, Value for Money and Sustainability.

Each one of these measures is linked directly to a target. The targets and measures are reviewed regularly by the Highways, Traffic and Transport Service Stream Board to identify and resolve any delivery issues. The measures themselves are reviewed annually to ensure they are current and continue to meet the objectives set out in this strategy. The outputs from this process inform the service delivery planning for the coming year.

### 6.3 **Gross Replacement Cost and Depreciated Replacement Cost**

In 2013 CIPFA, supporting HM Treasury policy, released a Code of Practice for valuing Local Authority highway infrastructure assets. The Code set out the processes and requirements that were intended for 2017 reporting to the HM Treasury for Whole of Government Accounts (WGA). In 2017 HM treasury put the process on hold until further notice and there is no current obligation to provide GRC and DRC valuation figures. However, the development of the valuation process and the CIPFA guidance did engender good asset management disciplines such as the need for accurate, well-managed and detailed inventory information and performance data. As these principles are now well established, Hampshire Highways continue to calculate GRC and DRC figures which can be useful indicators of asset management performance and investment.

6.4 The strategy developed with Finance colleagues for WGA provided useful information for the budget setting process and therefore these valuations continue to be made available.

### 6.5 **Communications and Stakeholder Engagement**

The Communications Plan for highways and highway asset management is available on line and is reviewed annually. For further information see the Hampshire Highways Communications Strategy. Any feedback received in the year is considered at the annual review and, as appropriate, amendments to the plan are incorporated in the document for the following year.

## 7 Data Management and Information Systems

7.1 Hampshire recognise that good and robust data is key to implementing asset management and delivering potential benefits. However, the Authority believes that the collection, management and use of data needs to be based on a process, which identifies:

- Ownership
- Data Objectives – business case
- Responsibilities
- Costs to manage and maintain data

An Asset Information Strategy has been established that provides guidance for the optimum use of available data. The strategy encompasses; data requirements, data management, highway management IT systems, reporting requirements and corporate IT needs. It will be used to inform current data collection needs for both inventory and condition information. Key drivers for this include:

- The need to provide evidence-based decisions
- Business need
- Performance monitoring
- Understanding customer and stakeholders wishes
- Valuation and depreciation of the highway asset
- Providing sufficient data management resources

7.2 Hampshire recognise that effective asset management and its implementation relies on systems, that can be used as tools to support decision making at all levels. The following tools are currently in use:

- Confirm – Integrated highway management system (works ordering, public enquiries, street works, structures, network management, inspections)
- ESRI ArcMap GIS (core asset management database)
- Bespoke 3<sup>rd</sup> party asset management software – Condition survey management, scheme programming and UKPMS
- Bespoke lifecycle models for carriageway, footway and ITS
- Structures Asset Valuation and Investment Tool (SAVI) – Lifecycle model for Structures

## 8 Maintainability

8.1 It is important that all new infrastructure projects consider the future impact on maintenance and that a 'designing for maintenance' approach is adopted by all

stakeholders responsible for delivering maintenance and transport schemes, and new developments.

- 8.2 To ensure that new infrastructure meets its aims and objectives but also considers the impact on maintenance, several processes have been developed and implemented to ensure that all new infrastructure schemes are reviewed, and the designs agreed by all stakeholders.

#### Asset Management Scheme Consultation

A review of detailed designs for all Section 38, Section 278, and minor highway improvement schemes is undertaken by the Asset Management Team.

#### Gateway Review Group

A multi stakeholder group that reviews the preliminary and detailed designs of highway improvement schemes up to the value of £2 million.

#### Major Scheme Project Boards

Multi stakeholder boards that review preliminary and detailed designs and deliver all major capital improvement schemes.

- 8.3 The review process advocates early communication between the AMT, Highway Development Agreement team, local planning authorities and developers to ensure that asset management principles have been considered and agreed as part of the scheme implementation.
- 8.4 Guidance for developers is available and provides material and layout options and informs the developer of any associated commuted sum payments that may be applicable should they wish to enhance their design. For further information on technical guidance, highway standards and commuted sums go to the [information for highways developers](#) webpage.

## 9 Continuous Improvement

- 9.1 This strategy identifies Hampshire's key objectives for developing a high-quality asset management approach and allows progress to be measured by continually reviewing Hampshire's alignment to the recommendations in the Highway Infrastructure Asset Management Guidance (HIAMG) issued in May 2013 and other relevant documents. The foundations for good asset management have been developed and the practices that have been implemented since 2004 include:
- Developing data collection and management processes- Hampshire continues to embed data management processes and the information strategy to inform asset data decisions and relates them to business need. As a result, Hampshire can prioritise resources and focus on areas where good data can provide best value and improve service delivery.
  - Measuring performance against set objectives- Hampshire has developed a Performance Management Framework (PMF) which reflects both asset management and corporate aims. The targets and measures within the



PMF are used to report performance against levels of service and to set budgets at a strategic level.

- Funding and investment planning- Lifecycle planning principles have been used to illustrate need and additional funding has been provided from local resources and prioritised for structural repairs. Lifecycle models have been developed for carriageways, footways, structures and Intelligent Transport Systems (ITS). The outputs of these models are used in the Highway Cross Asset Investment Plan which provides investment options against levels of service to enable evidence-based investment decisions.
- Setting up formal structures to develop and lead asset management- This formal structure has been in place for over ten years and has overseen asset management development during that time. Asset management working groups continually review membership to ensure all relevant stakeholders are represented.
- Improving communications – A central Highway Operations Centre (HOC) has been set up to focus on and continually refine and improve the service to all our customers via multiple communication routes including extensive call centre, web self-service and social media platforms.
- Highway Network Hierarchies – Network hierarchies have been developed to align with the recommendations in the Well Managed Highway Infrastructure Code of Practice and are regularly reviewed. These hierarchies facilitate the application of a risk-based approach for all maintenance operations across all assets.
- Training and competencies – the UK Roads Liaison Group Asset Management Competency Framework was implemented in 2019. This has been embedded in the annual personal performance review process for all staff in key asset management roles to ensure that the required competencies and development needs have been identified.

9.2 Under the direction of the Asset Management Organisational Structure, there are a number of key projects underway that will provide a more efficient service in the coming years, these include:

- Forward works programme and lifecycle planning– An alternative 'outcome based' highway condition survey has been procured. A new approach to lifecycle approach is required and being developed. This will be done in tandem with further work to improve the multi-year forward works programming process.
- Resilient Network Plan- A resilient network and a Winter Maintenance and Severe Weather Response Plan have been in place for many years. An overarching Resilient Network Plan is being developed to link existing documents and processes to improve the identification and mitigation of issues and risks for all assets on the resilient network.
- Footway and cycleways – The existing hierarchies are being reviewed to ensure they align with the active travel agenda, the Movement and Place Framework and the Local Cycling and Walking Infrastructure Plans (LCWIPS)



- Communications and stakeholder engagement – An Asset Management Communications site is being developed. This platform will provide internal stakeholders with a one stop shop with information on all aspects of highways asset management.
- Technical Guidance – Comprehensive reviews of Hampshire’s technical guidance notes and commuted sums policy are underway to ensure design standards are up to date and that appropriate levels of funding are received from new developments.
- Climate Change and sustainability – Work is underway to develop a carbon catalogue and toolkit to calculate and compare whole life carbon generation for materials, products, and processes.

The Hampshire Highways Carbon Strategy has been developed and is being implemented to change how we deliver highway operations to reduce our impact on the environment and create a low carbon service. This strategy will support aims and objectives in Hampshire County Council’s Climate Change Strategy.

- Network Recovery – A Network Recovery Strategy has been developed and sets out a long-term plan to address the long-standing backlog of highway maintenance. Numerous asset management processes and procedures are being developed and refined to assist the delivery of this strategy to ensure improvements are targeted in the most cost-effective way.

## 10 Good Practice

10.1 Hampshire is committed to the development and implementation of asset management good practice and benefits from lessons learnt at National, Regional and Local levels. Officers from Hampshire County Council regularly contribute to, attend or have hosted:

- National and regional conferences
- The Chartered Institute of Public Finance and Accountancy (CIPFA) Highways Asset Management Planning Network
- South East Authorities Service Improvement Group (SEASIG)
- South East 7 Asset Management Group (SE7)

10.2 Hampshire is also committed to sharing asset management best practice with other Highway Authorities across the Country. Officers from Hampshire present examples of good practice nationally at workshops and conferences and are members of the following groups:

- Road Condition Management Group (RCMG)
- Footway and Cycleway Management Group (FCMG)
- Visual Surveys Subgroup (VVSG)
- Local Council Roads Innovation Group (LCRIG)

## 11 Review Process

- 11.1 This strategy will be reviewed and updated regularly to ensure it aligns with national and local best practice and the latest highway code of practice. The review process will be managed by the Asset Management team and signed off by the AMPG.

## 12 Benefits of the Asset Management Strategy

- 12.1 The benefits of implementing the asset management strategy are summarised below:
- Encourages engagement with other stakeholders, including Elected Members, Senior Officers and the public
  - Readiness to respond to changes resulting from climate change, weather emergencies, contractors, resilience and finance
  - Close working and integration of efforts with other parts of the Council, including corporate aims and objectives
  - Evidence based management of risk
  - Line of vision linking corporate objectives to, maintenance operations and Local Transport Plan objectives
  - Improved delivery within budget constraints – including procurement
  - Efficiencies – better ways of doing things, or improved service, enhancing performance in a challenging environment
  - Improved communications and understanding of customer aspirations and expectations
  - To influence and focus on the better use of resources