

# Highway Asset Management Strategy

May 2014 - Version 2

# Surrey County Council Asset Management Strategy

# 1 Priorities, Vision and Objectives

- 1.1 Surrey County Council (SCC) recognises the importance of transport in delivering the Council's strategic priorities for economic growth and closer working with partner organisations and to engage with and listen to residents.
- 1.2 The Council's vision is:

#### 'To be delivering great value for Surrey's residents'.

The Council's Transport Plan, describes a set of objectives that underpin this vision.

- 1.3 In support of this, "Operation Horizon", is providing additional capital funding for roads over a 5-year period from 2013. The Surrey Priority Network is an ongoing review of road categories to ensure all roads and footways have the most appropriate maintenance and inspection regimes for their present usage. The county council has devolved significant funds to Local Area Committees to spend on local roads priorities and is also working successfully with parishes to increase their involvement.
- 1.4 An Asset Management Policy has been developed that defines how the implementation of asset management will support SCC in delivering its Corporate vision. This Asset Management Strategy describes how the Asset Management Policy is to be delivered, sits within the wider Asset Management Framework, and is one of the key strategic documents related to the delivery of the Council's highway services.

# 2 The Highway Asset

- 2.1 Surrey's highway network comprises just over 4,800 kms of carriageway. The unclassifed network accounts for around 66% of the asset. The footway and cycleway network is over 5,000kms, of which just under 200kms is shared cycleway/footway. The highway asset also includes over 10,000 traffic signs, around 600 traffic signals, about 113 kms of safety fencing and approximately 89,000 lighting columns. In terms of structures, the Council is responsible for approximately 1,650 road bridges, footbridges, underpasses, subways, culverts, and retaining walls. The highway assets also includes drainage, street furniture, road markings and soft estate.
- 2.2 The Council has calculated the asset value in accordance with the requirements for Whole of Government Accounts. In July 2013 the gross replacement cost was estimated to be £7.8 billion, and the depreciated replacement cost was £7.3 billion.
- 2.3 Tackling transport problems in Surrey relies on successful partnership working and shared responsibility involving many organisations, businesses, transport operators, and individuals, together with the County Council.

# 3 Managing the Highway Asset

3.1 Responsibility for managing the highway asset rests with SCC. The proposed structure for the Environment and Infrastructue Directorate, which is being consulted on during 2014, reflects the responsibilities for policy development and delivery of maintenance activities. This Proposed structure is summarised in Figure 1 Organisational Structure.

# **E&I Proposed Structure**

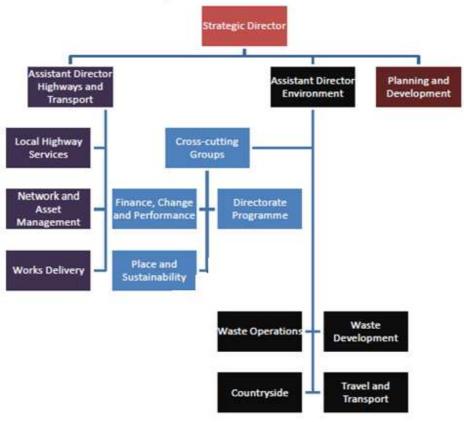


Figure 1: Organisational Structure

- 3.2 This Asset Management Strategy provides describes the initiatives and processes that enable the implementation of asset management. It also makes reference to the enablers, both tools and information, necessary for delivering the highway service effectively and efficiently.
- 3.3 One of the Environment and Infrastructure Directorate's priorities for 2013 to 2018 is "Operation Horizon" which aims to improve Surrey's roads by developing a five-year capital investment programme (which began in 2013).
- 3.4 Surrey has implemented asset management principles for a number of years. This approach is further demonstrated by "Operation Horizon" which will is providing

additional capital funding to support the road asset and demonstrates the council's objective to enhance the highway network, providing residents and the economy with a better place to live and do business in.

# 4 Asset Management

4.1 Asset management is defined as

"A systematic approach to meeting the strategic need for the management and maintenance of highway infrastructure assets through long term planning and optimal allocation of resources in order to manage risk and meet the performance requirements of the authority in the most efficient and sustainable manner"

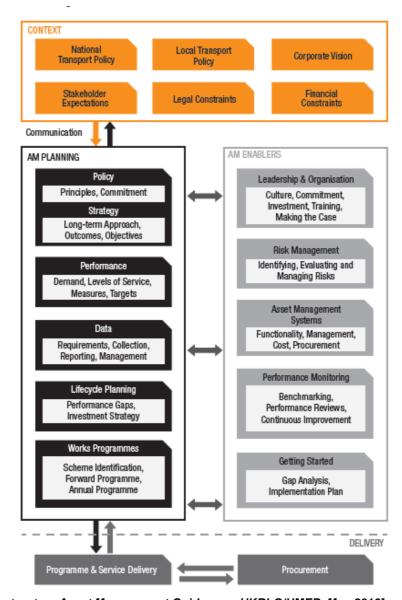
[Highway Infrastructure Asset Management Guidance – UKRLG/HMEP, May 2013]

- 4.2 This definition puts emphasis on the systematic approach that asset management plays in managing the strategic needs of highway assets within an organisation and highlights the need for optimal allocation of resources and long term planning.
- 4.3 The adoption and implementation of asset management principles, strategies and plans provides a means for SCC to face the challenges of managing the highway asset, through the development of a systematic approach. The aim is to deliver the most efficient and effective maintenance regime over the lifecycle of the asset, ensuring that the performance of that asset reflects the requirements of the Council.
- 4.4 In addition, the adoption of asset management is seen as a tool to enable the Council to establish appropriate budget allocations by demonstrating the effects of under-investment and the implications of not meeting safety and serviceability requirements of the customers using the network. "Operation Horizon" is a good example of how asset management has demonstrated the case for additional capital funding.

# 5 Asset Management Framework

This Asset Management Strategy is based on the framework shown schematically in Figure 2, and outlined in the following sections. The elements of this strategy will support continual improvement in the management of the various highway assets.

#### **ANNEX 2**



[Highway Infrastructure Asset Management Guidance – UKRLG/HMEP, May 2013]
Figure 2: Asset Management Framework

This Strategy explains how individual asset groups and components fit in the framework, describes how the asset management planning process is implemented and refers to tools currently employed, as well as links to other key documents.

- 5.1 Finally, the strategy describes how the council will embed a continuous improvement approach to highway asset management, including how national developments and good practice are taken into consideration, as well as how the work carried out in Surrey can influence the national asset management agenda.
- 5.2 The development of the asset management framework described in Figure 2 follows national guidance and recognised good practice. It is also based on the council's approach to delivering services and alligns with the corporate policies on performance management and risk management.

The framework refers to a number of key policies and documents. The Surrey Asset Management Framework will support the implementation of this Strategy. The Surrey Highway Maintenance Management Plan (SHMMP) describes the operational activities and procedures related to highway maintenance, together with the annual maintenance management plan(s).

### 6 Implementation of Asset Management

6.1 In accordance with good practice, priority has been placed on certain elements of the asset management framework, in order to facilitate full implementation of asset management in due course.

#### **Data Collection**

- 6.2 Effective management of the highway asset can only be achieved through reliable, current and robust data.
- 6.3 Surrey has a robust data collection methodology which ensures it meets national government survey requirements regarding road condition data collection on the principal and non principal network and in addition it also carries out inspections and surveys on assets including, unclassified roads, footways, safety barriers and structures.

In 2014 we will be carrying out a video survey of our entire road network and this will be used to update our inventory data for all of our Highway Assets.

#### Levels of Service

- A key function of the asset management process is to understand the spending needs of each asset group against performance, aims and objectives. This means understanding how funding needs to meet:
  - Transport Plan objectives;
  - Delivery Planning
  - Performance Targets.
- 6.5 Currently Surrey's Levels of Service are largely based on established perfomance measures, e.g. National Indicators (NI's), where available. Revised levels of service will be developed as part of Surrey's 15 year Asset Management Strategy.

#### Lifecycle Planning

- Inherent to the asset management process is a need to understand the influence of budget decisions on customer satisfaction and delivery of corporate priorities. Furthermore, the impact of investing in one asset component may have on the overall performance of other asset components, as well as the whole asset, is examined. To this end, a lifecycle planning approach has been developed and is being used.
- 6.7 In line with national guidance and good practice SCC is developing 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 provided are essential pre-requisites to good asset management. Successful implementation of the lifecycle approach relies on good understanding of the asset, its current performance, expenditure and customer feedback, as well as an understanding of the various service levels that may be achieved for the different funding options.

6.8 Surrey is developing an asset model that combines established treatment strategies and local knowledge of asset performance with current condition and inventory information to assess the impact of varying maintenance scenarios on the whole life performance and funding requirements of the highway asset. Initial work has demonstrated its value in supporting the MTFP and long term planning for the highway network and further development of the model will be carried out during 2014 following the implementation of a new visualised Asset Management System described in section 8.

# 7 Financial Planning

One of the key benefits of asset management is that it provides the platform for robust and transparent financial planning. This has been used to provide evidence to support the need for additional capital funding for roads initially for a period of 5 years from 2013.

#### Gross Replacement Cost and Depreciated Replacement Cost

Whole of Government Accounts (WGA) have set new requirements for the way the value of the highway asset is reported to the HM Treasury in the Authority's audited accounts. Currently information for Highway Infrastructure Assets is not audited in the accounts, but a provisional date of 2016/17 has been suggested as the date when Highway Infrastructure Assets will be fully reported within the Authorities accounts. For this to be achieved, there is clear need for accurate and detailed inventory information and performance data. This requirement supports asset management implementation by providing an improved understanding of network deterioration and combining that with affordable Levels of Service.

SCC has adopted this approach and calculated the value of highway assets in accordance with WGA requirements. Further developement and implementation of the asset management approach will allow the calculation of asset value to be refined and hence support the process of financial planning.

# 8 Data Management and Information Systems

Surrey Highways operates a number of a highway maintenance and management systems each leading products for effectively managing different highway assets.

In 2014 Surrey Highways will be implementing a new visualised asset management system which will enable highway engineers to view and analyse data on all assets in a single system. This system will enable us to make more informed maintenance decisions.

#### 9 Good Practice

SCC is committed to the development of good practice and benefits from lessons learnt at National, Regional and Local levels. Officers from Surrey have played a

#### **ANNEX 2**

leading role in the development of the national and regional agenda on highway asset management, carrying the responsibility of representing the interests of smaller highway authorities. This is done through attendance at:-

- The UK Roads Board;
- The Programme Board for the Highway Efficiency Maintenance Programme (HMEP)
- South East 7 Alliance
- SEASIG (South Eastern Authorities Service Improvement Group)

#### 10 Review Process

The Surrey Asset Management Framework is a series of 'live' documents and will be subject to regular review as the highway network evolves over time.

#### 11 References

Well Maintained Highways - Code of Practice for Highway Maintenance Management. UKRLG

Well-Lit Highways – Code of Practice for Road Lighting Management. UKRLG Management of Highway Structures – A Code of Practice. UKRLG

Management of Electronic Traffic Equipment - A Code of Practice. UKRLG

CIPFA Transport Infrastructure Assets Code

Maintaining a Vital Asset

**UKRB** Quick Start Guidance

HMEP/UKRLG Highway Infrastructure Asset Management Guidance

Surrey Transport Plan - Vision and Objectives.

Surrey County Council - Highway Maintenance Management Plan