

## **Hampshire's Asset Management Strategy**

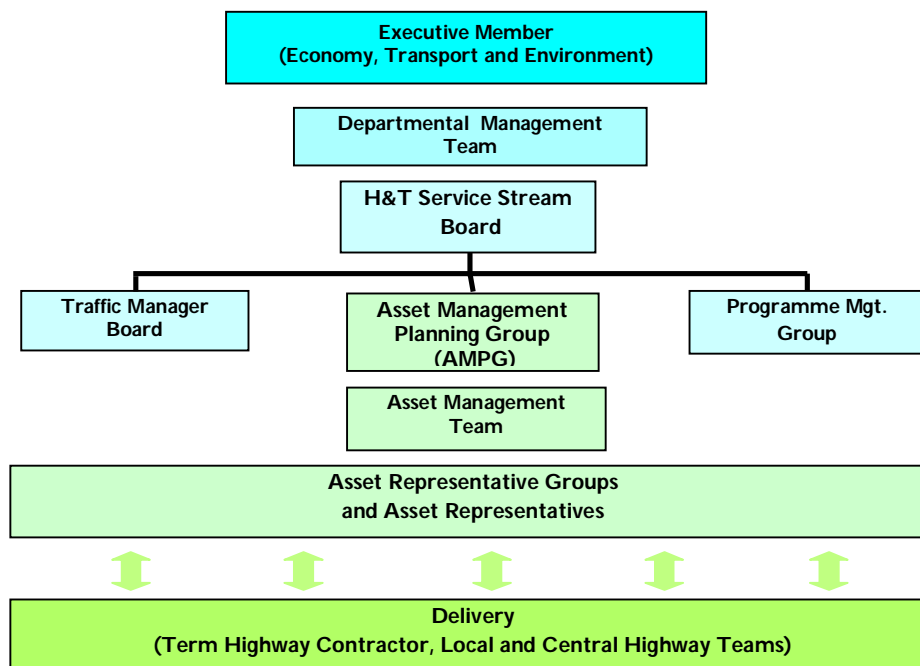
### **1 Implementing Effective Asset Management**

- 1.1 Hampshire County Council recognises the importance of the highway infrastructure in the context of the well being of all who use it. The Authority is committed to the good management of the highway asset not only for now but also, for future generations, and recognises that asset management provides the required approach for efficient management of the network to deliver required levels of service.
- 1.2 To this end, Hampshire have been working on implementing asset management principles over a number of years. A Transport Asset Management Plan (TAMP) was drafted in 2005, linking together various key documents to provide a consistent and uniform approach to the management of the highway infrastructure.
- 1.3 Following the development of the draft TAMP, the Council has been focusing on the implementation of an asset management approach. Priority is given to the management of asset information and its effective use, as well as the development of processes that deliver required outcomes, through the use of appropriate tools which support budget and lifecycle management planning.

### **2 Asset Management Framework in Hampshire**

- 2.1 This Asset Management Strategy 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.
- 2.2 Encompassed within the AM framework and a key document is the Council's Highway Maintenance Management Plan (HMMP) which contains the approved and adopted policies and procedures in respect to the Council's legal requirements and its service provision. This document reflects the guidance laid down in the suite of national Codes, in particular the Code of Practice '*Well-maintained Highways*'.

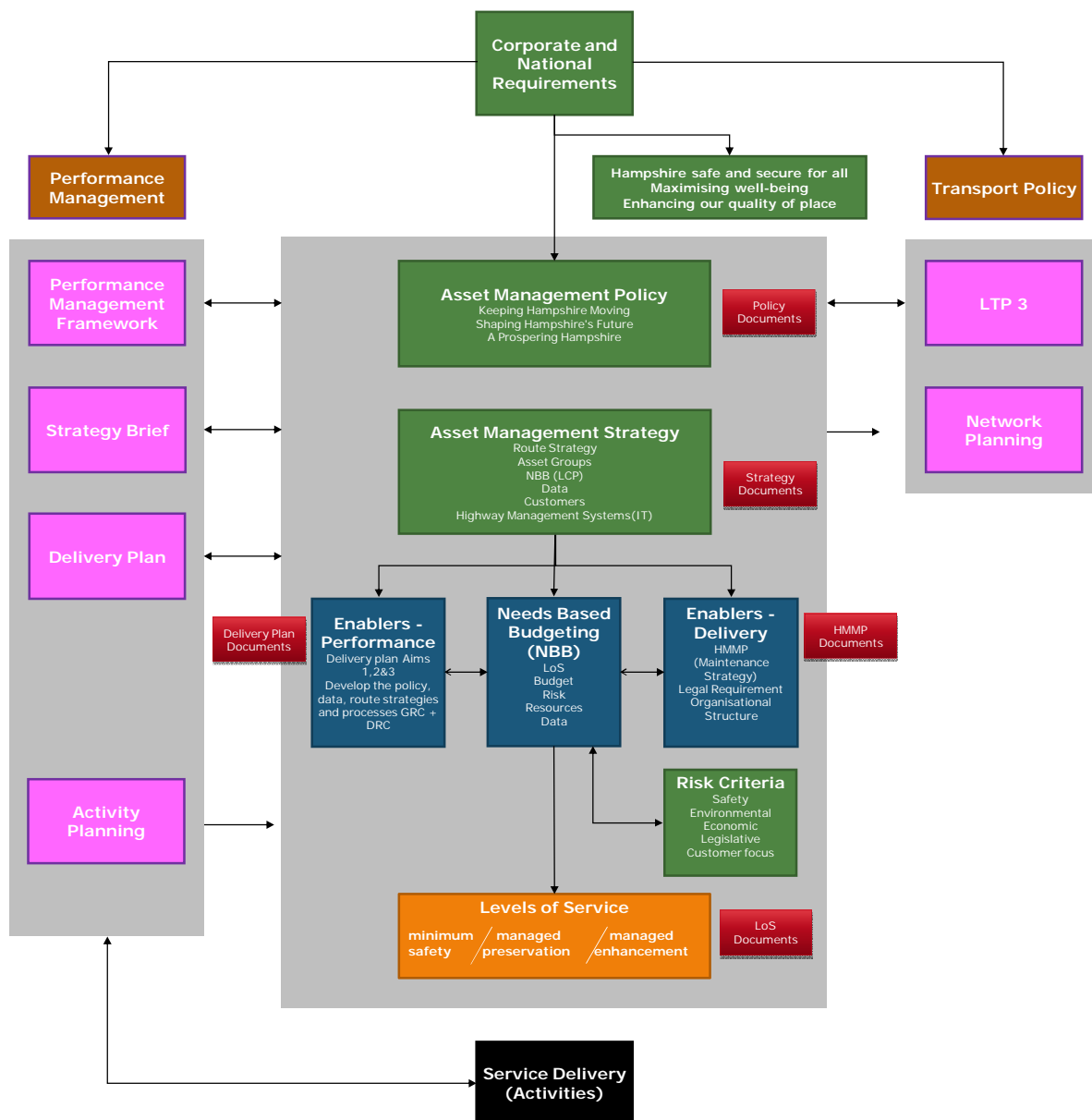
2.3 In addition to the development of strategic documents and in order to embed and promote Asset Management practices, the Environment Department has set up an organisational structure that reflects the importance asset management plays in the delivery of highway services, as described in Figure 1.



**Figure 1: Organisational Structure**

- 2.4 The main aim of the Asset Management Planning Group (AMPG) is to provide strategic guidance for the successful adoption of the asset management strategy, raise the level of understanding of the role of highway asset management in the Department and lead the implementation of asset management planning. The aim of the Asset Management Team (AMT) is to support the AMPG in promoting the principles of asset management and implementing its associated improvement actions.
- 2.5 This Asset Management Strategy sets out how the Department’s Asset Management Policy is to be achieved. In particular, it describes how the Department is working towards implementing an asset management approach to the management of the Authority’s highway network. It provides the framework for delivering our corporate priorities through effective, informed and defensible decision making.
- 2.6 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.
- 2.7 This strategy is based on the framework shown schematically in Figure 2, and outlined in the following sections. This framework clearly identifies the

relationships between asset management, the influences of corporate and national drivers and internally the Departmental Delivery Plan and Transport Planning, The Asset Management Strategy will inform priorities in the delivery planning process and therefore support continual improvement in the management of the highway asset.



**Figure 2: Asset Management Framework**

2.8 This strategy covers all maintenance led activities including activities funded by capitalised revenue funding. Decisions related to capital improvements are not presently covered in this Strategy.

- 2.9 This strategy explains how individual asset groups and components fit in the framework, describes how the asset management planning process is implemented in the Department and refers to tools currently employed, as well as links to other key documents. Finally, the strategy describes how the Department 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 Hampshire can influence the national asset management agenda.

### **3 Strategy for Individual Assets**

- 3.1 As part of the asset management framework, and in accordance with other national guidance, the highway asset has been divided into asset groups. Each group is then broken down into asset components and activities. The asset groups and components are described in Section 4 below.
- 3.2 A key function of the asset management process is to understand the spending needs of each asset group, component and activity against performance, aims and objectives. This means understanding funding needs to meet:
- LTP objectives;
  - Delivery Planning
  - Performance Targets.
- 3.3 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 component may have on the overall performance of other asset components, as well as the whole asset, is examined. To this end, a Needs Based Budgeting (NBB) approach has been developed and is being used.
- 3.4 For the delivery of the highway service, Hampshire divides its highway network in geographical areas covering all routine and operational functions and a central office which administers the Term Highways Contract and delivers the structural maintenance programmes.
- 3.5 In line with national guidance and good practice, Hampshire 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 (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.
- 3.6 Hampshire's NBB approach to delivering the principles of lifecycle management planning employs a risk management approach in assessing the influences across the following criteria; Legislative, Safety, Environmental, Economy and Customer
- 3.7 This approach allows for budgets to be split at a strategic level based on a common set of criteria. Successful implementation of this 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.

- 3.8 This understanding can only be achieved through reliable, current and robust data and Hampshire is developing data and information strategies, which set out data collection needs, data management requirements and the IT infrastructure necessary to process and present this information, (see also section 6 below).

## 4 Asset Groups and Components

- 4.1 Hampshire's highway asset has been divided into key assets groups and components, as described in Table 1.

<b>Asset Group</b>	<b>Asset Component</b>
<b>A Roads</b>	Carriageway
	Drainage
<b>B Roads</b>	Carriageway
	Drainage
<b>C Roads</b>	Carriageway
	Drainage
<b>U Roads</b>	Carriageway
	Drainage
	Fences and Barriers
<b>Footways and Cycleways (A Roads)</b>	Footways and Cycleways
<b>Footways and Cycleways (B Roads)</b>	Footways and Cycleways
<b>Footways and Cycleways (C Roads)</b>	Footways and Cycleways
<b>Footways and Cycleways (U Roads)</b>	Footways and Cycleways
<b>Structures</b>	Bridges, Retaining Walls, Culverts, etc
<b>ITS</b>	Traffic control and information systems
<b>Signs and Street Furniture</b>	Signs
<b>Environmental</b>	Grass
	Trees
	Shrubs
	Weeds
<b>Weather Emergencies</b>	Depots
	Facilities

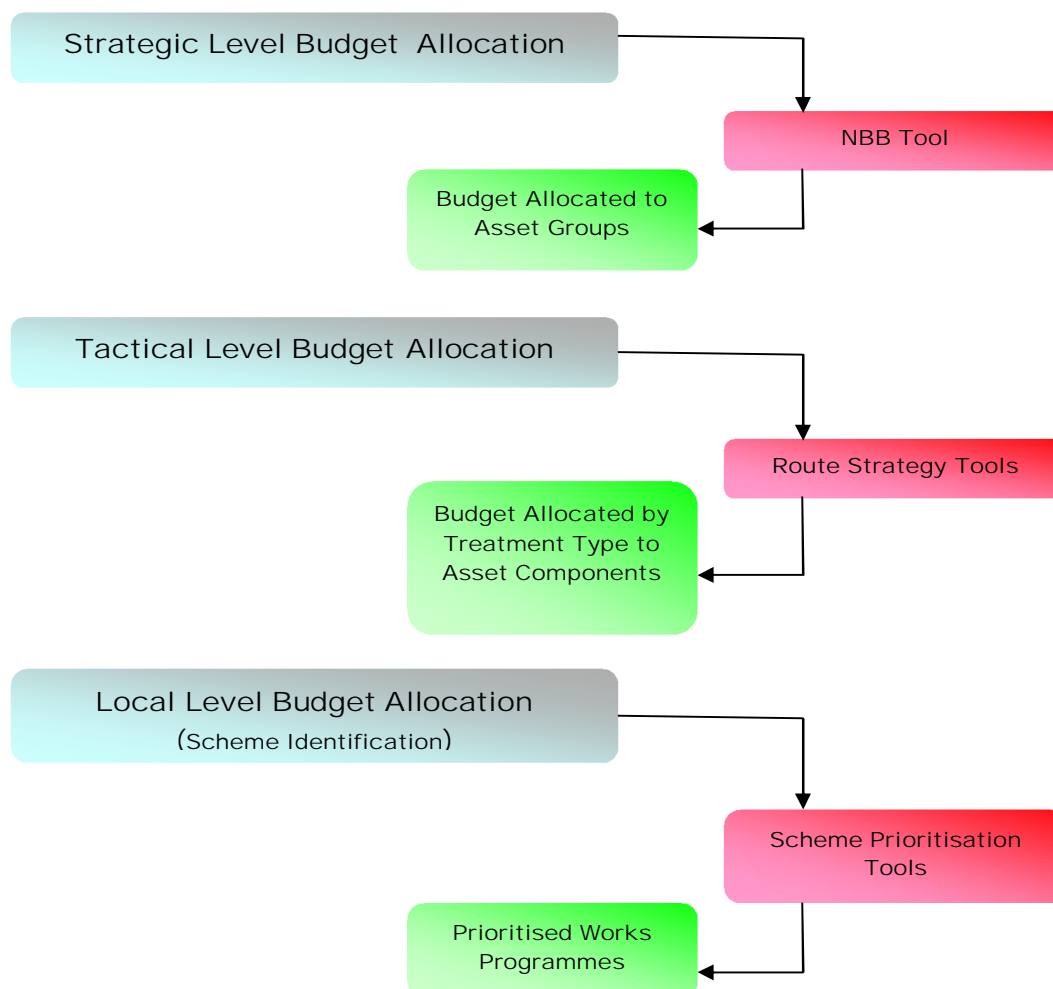
**Table 1: Asset Groups and Components**

- 4.2 A number of activities are included under each component, as described in Appendix A.
- 4.3 This approach has been adopted to allow a clear understanding of budget allocation across the different asset components, facilitating the recording of where money is invested, hence linking expenditure to activities. Identifying where money is invested, allows the Council to monitor performance against service delivery and thus allows the implementation of a continuous improvement process, within the constraints of available funds.
- 4.4 Dividing the Asset into component parts and identifying the relative costs and demand for planned, routine and reactive maintenance activities is seen as a essential process upon which NBB can be developed.

## 5 Asset Management Planning

### *Needs Based Budgeting*

- 5.1 Hampshire considers that NBB is fundamental to good asset management planning and robust investment and lifecycle planning decisions. Substantial resources have therefore been focussed on and will continue to support the development of processes and tools to inform budget decisions at strategic, tactical and local levels.



### **Figure 3: Budget Allocation Process**

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

- 5.2 At the **strategic level** processes and tools have been developed which allow informed budget allocation decisions to be measured across a range of criteria. This approach considers the risks and benefits of funding individual activities. To achieve this, five risk criteria, with four sub-criteria for each, have been developed, as described in Appendix B. These criteria are assessed against each activity to determine impact on the service for different budget scenarios. Through this approach, funding is linked to service bands. Three bands have been determined, namely Minimum Safety, Preservation and Enhancement. This tool has been developed to assess the impact of changing funding levels of each activity to the overall service. Targeted investment and informed decisions are therefore encouraged, by identifying the level of service that can be achieved for a given budget allocation.
- 5.3 At the **tactical level** a tool for carriageways has been developed, which allows lifecycle aspirations to be considered and compared with condition targets, budget constraints and stakeholders wishes, offering options for route and treatment strategies. Where suitable data is available this concept can, and will be implemented across other asset groups
- 5.4 At the **local level** packages of information are prepared annually, allowing planned maintenance teams to formulate programmes of work based on the allocations identified in the previous stages. To further support and inform local needs a prioritisation tool has been developed for carriageways to formulate programmes of work that relate to the high level aspirations, bringing customer focus and economic influences into the decision process. Where suitable data is available and where appropriate this concept will be extended to encompass other Asset Groups. This will allow decisions to be made that consider criteria other than condition and determine programmes that are not necessarily 'worst condition first'.

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

- 5.5 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. The new approach needs to be fully implemented by 2012/13, at which time authorities are required to report the Depreciated Replacement Cost (DRC) of the 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.
- 5.6 A strategy is being developed with the Department's Devolved Finance Unit to ensure asset management practices are in place to satisfy the financial reporting requirements defined in the new Transport Infrastructure Assets Code, published by CIPFA in May 2010.

Hampshire embraces this approach and is developing the processes for collating the data needed to meet the WGA requirements, whilst developing good asset management practices that will lead ultimately, to a refinement of the service.

## 6 Data Management and Information Systems

6.1 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
- responsibilities
- costs to manage and maintain data

all of which need to be clearly defined.

To this end, an asset information strategy is being developed that allows for optimum use of available data. This information strategy will encompass; data needs (data collection decisions), data management, highway management IT systems, reporting requirements (business information) 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:

- GRC / DRC
- Management Resources
- Performance
- Customer
- Business

6.2 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 by the Authority:

- EXOR, covering most of highway management needs, including works order, public enquiries, street works, structures, network management, inspection process;
- MARCH UKPMS;
- GIS (as the core of asset management); and
- Bespoke tools to support all of those.

These systems are all under review and a project with efficiency objectives is currently underway to examine Highway Management information and system needs. Joint working and procurement with neighbouring authorities will help lead the efficiency drive and help to procure a system which is both integrated and is fully adapted to the needs of the business.

## 7 Maintainability

- 7.1 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 the this issue, in accordance with national guidance.
- 7.2 Hampshire has developed and is implementing a process for incorporating new works into the existing highway network. The process advocates lifecycle management values and introduces early communication between clients and maintaining agents to ensure that asset management principles have been considered and agreed as part of the scheme implementation.
- 7.3 This process aims to ensure that all capital and revenue investment options have been considered fully, where new works should only require maintenance in line with expected lifecycles.

## 8 Good Practice

- 8.1 Hampshire is committed to the development of good practice and benefits from lessons learnt at National, Regional and Local levels. Officers from Hampshire County Council regularly contribute to and attend:
- National and regional conferences;
  - The CIPFA Highways Asset Management Planning Network;
  - South East Authorities Service Improvement Group (SEASIG).
- 8.2 Furthermore, Hampshire is committed to the sharing of knowledge and experiences in implementing asset management with other Highway Authorities across the Country. To this end, officers from Hampshire regularly present examples of good practice at national conferences and are members of the following groups:
- Highways Asset Management Financial Information Group (HAMFIG);
  - UK Roads Board;
  - Footway and Cycletrack Maintenance Group (Chair);
  - Roads Board Advisory Group (RBAG); and

- ADEPT/TAG Asset Management Working Group.

## 9 Supporting Documentation

- 9.1 The Asset Management Strategy refers and is linked to a number of key documents, as listed below, that combined allow for the asset management approach to be implemented and support the delivery of the desired level of service. These include documents in Table 2:

<b>National</b>	<b>Hampshire</b>
UKRLG Codes of Practice	HMMP
CIPFA Financial Reporting Code	LTP3
PAS 55	Service Delivery Plan
CSS Framework for Highway Asset Management	Delivery Plan
Maintaining a Vital Asset	Corporate Strategy
UKRB quick start documents	NBB process documents: including strategic, tactical and local prioritisation tools

*Table 2: Supporting Documentation*

## 10 Review Process

- 10.1 This strategy will be updated annually with minor amendments and reviewed on a three yearly basis to align with the HMMP. This process will be managed and implemented by the AMPG.

## 11 Benefits of our Asset Management Strategy

- 11.1 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;
- Improved delivery within budget constraints – including procurement;
- Efficiencies – better ways of doing things, or improved service, enhancing performance in a challenging environment.
- Improved understanding of customer aspirations and expectations;
- To influence and focus on the better use of resources.

## Appendix A

### Asset Groups, Components and Activities

Asset Group	Asset Component	Activity	What's included
A Roads	Carriageway	Reactive Routine Repairs	Includes all reactive repairs agreed in the Service Activity
		SM - Planned patching	All patching planned, not including patching carried out above on a reactive basis.
		SM - Pre SD patching	All patching carried out in advance of a surface treatment programme.
		SM - Schemes	All structural improvements which are allocated a scheme number.
		Resurfacing	All inlay and overlay schemes which are allocated a scheme number
		Surface Treatment	All surface dressing, micro asphalt, slurry and rejuvenation treatments.
		Special Surfacing	All anti skid and coloured surfacings.
		Road Marking	All white and yellow lining and studs
	Drainage	Cleansing	All routine cleansing operations on gullies, catchpits, soakaways etc.
		Routine Reactive	All small element planned repairs, jetting, CCTV, reseating
		Routine Structural	Includes all unplanned reactive repairs
		Planned and Structural Maintenance	All structural improvements which are allocated a scheme number.
		Pumps (BVR etc)	Pump maintenance on BVR, Bentley by pass - not including subway pumps
B Roads	Carriageway	Reactive Routine Repairs	Includes all unplanned reactive repairs
		SM - Planned patching	All patching planned, not including patching carried out above on a reactive basis.
		SM - Pre SD patching	All patching carried out in advance of a surface treatment programme.
		SM - Schemes	All structural improvements which are allocated a scheme number.
		Resurfacing	All inlay and overlay schemes which are allocated a scheme number

**Appendix 2**

		<b>Surface Treatment</b>	All surface dressing, micro asphalt, slurry and rejuvenation treatments.
		<b>Special Surfacing</b>	All anti skid and coloured surfacings.
		<b>Road Marking</b>	All white and yellow lining and studs
	<b>Drainage</b>	<b>Cleansing</b>	All routine cleansing operations on gullies, catchpits, soakaways etc.
		<b>Routine Reactive</b>	All small element planned repairs, jetting, CCTV, reseating
		<b>Routine Structural</b>	Includes all unplanned reactive repairs
		<b>SM - Schemes</b>	All structural improvements which are allocated a scheme number.
<b>C Roads</b>	<b>Carriageway</b>	<b>Reactive Routine Repairs</b>	Includes all unplanned reactive repairs
		<b>SM - Planned patching</b>	All patching planned, not including patching carried out above on a reactive basis.
		<b>SM - Pre SD patching</b>	All patching carried out in advance of a surface treatment programme.
		<b>SM - Schemes</b>	All structural improvements which are allocated a scheme number.
		<b>Resurfacing</b>	All inlay and overlay schemes which are allocated a scheme number
		<b>Surface Treatment</b>	All surface dressing, micro asphalt, slurry and rejuvenation treatments.
		<b>Special Surfacing</b>	All anti skid and coloured surfacings.
	<b>Road Marking</b>	All white and yellow lining and studs	
	<b>Drainage</b>	<b>Cleansing</b>	All routine cleansing operations on gullies, catchpits, soakaways etc.
		<b>Routine Reactive</b>	All small element planned repairs, jetting, CCTV, reseating
<b>Routine Structural</b>		Includes all unplanned reactive repairs	
<b>SM - Schemes</b>		All structural improvements which are allocated a scheme number.	
<b>U Roads</b>	<b>Carriageway</b>	<b>Reactive Routine Repairs</b>	Includes all unplanned reactive repairs
		<b>SM - Planned patching</b>	All patching planned, not including patching carried out above on a reactive basis.
		<b>SM - Pre SD patching</b>	All patching carried out in advance of a surface treatment programme.
		<b>SM - Schemes</b>	All structural improvements which are allocated a scheme number.
		<b>Resurfacing</b>	All inlay and overlay schemes which are allocated a scheme number
		<b>Surface Treatment</b>	All surface dressing, micro asphalt, slurry and rejuvenation treatments.

**Appendix 2**

		<b>Special Surfacing</b>	All anti skid and coloured surfacings.	
		<b>Road Marking</b>	All white and yellow lining and studs	
		<b>Drainage</b>	<b>Cleansing</b>	All routine cleansing operations on gullies, catchpits, soakaways etc.
			<b>Routine Reactive</b>	All small element planned repairs, jetting, CCTV, reseating
<b>Routine Structural</b>	Includes all unplanned reactive repairs			
		<b>SM - Schemes</b>	All structural improvements which are allocated a scheme number.	
	<b>Fences &amp; Barriers</b>	<b>New Forest fencing</b>	All boundary fencing within the New Forest National Park	
		<b>Boundary fencing</b>	All boundary fencing other than that within the New Forest National Park	
		<b>Safety Barriers</b>	All routine work completed in the SA or completed by routine gangs as task orders.	
		<b>Safety Barriers - renewal</b>	All programmed replacement work	
		<b>Cattle grids</b>	All routine repairs, structural replacement and programmed work.	
<b>Footway/Cycleways</b>  <b>(A roads)</b>	<b>Footways &amp; Cycleways</b>	<b>Reactive Routine repairs</b>	Includes all unplanned reactive repairs kerbs and footways	
		<b>SM - Planned Patching</b>	All planned patching and PSDP, not including patching carried out above on a reactive basis.	
		<b>SM Schemes</b>	All structural repairs or resurfacing which are allocated a scheme number.	
		<b>Surface Treatments</b>	All surface dressing, slurry seals or other surface treatments	
<b>Footway/Cycleways</b>  <b>(B roads)</b>	<b>Footways &amp; Cycleways</b>	<b>Reactive Routine repairs</b>	Includes all unplanned reactive repairs kerbs and footways	
		<b>SM - Planned Patching</b>	All planned patching and PSDP, not including patching carried out above on a reactive basis.	
		<b>SM Schemes</b>	All structural repairs or resurfacing which are allocated a scheme number.	
		<b>Surface Treatments</b>	All surface dressing, slurry seals or other surface treatments	
<b>Footway/Cycleways</b>  <b>(C roads)</b>	<b>Footways &amp; Cycleways</b>	<b>Reactive Routine repairs</b>	Includes all unplanned reactive repairs kerbs and footways	
		<b>SM - Planned Patching</b>	All planned patching and PSDP, not including patching carried out above on a reactive basis.	
		<b>SM Schemes</b>	All structural repairs or resurfacing which are allocated a scheme number.	
		<b>Surface Treatments</b>	All surface dressing, slurry seals or other surface treatments	

Footway/Cycleways  (U roads)	Footways & Cycleways	Reactive Routine repairs	Includes all unplanned reactive repairs kerbs and footways
		SM - Planned Patching	All planned patching and PSDP, not including patching carried out above on a reactive basis.
		SM Schemes	All structural repairs or resurfacing which are allocated a scheme number.
		Surface Treatments	All surface dressing, slurry seals or other surface treatments
Structures	Bridges, Retaining walls, Culverts etc	Structural renewals	Replacement of bridges nearing end of life or becoming un-maintainable. Mainly steel bridges, with troughing as primary structural elements
		Structural routine repairs, including reactive	Routine, urgent and Priority 1 from inspections + emergency + accident/vandal damage
		Strengthening / restrictions	Replacement or restriction of bridges that have failed load assessment for 40tonnes
		Painting	Painting of structural steel, mainly footbridges over railways
		Graffiti / refurb	Cleaning of graffiti and routine mtce
		Pumps	Bi-annual servicing of highway pumps
		Safety work	Protective measures at road/rail interface sites + installation of current parapets at accident sites and those not to current standards
		Contract Repairs	Repairs to signal equipment
		Contract Replacement	Replacement of signal equipment
		Equipment Refurbishment	Site renewal
			Assumed on-going SSE costs. (Currently SSE costs are 3K for the small part of the asset that is metered with the balanced for the majority of the asset paid through the unmetered Street Lighting tariff. The proportion of the unmetered bill (street lights v signals) is being calculated by the PFI team. At this time it is believed that this will still be paid by the Street Lighting team, but the costs attributable to signals may need to be added to the ITS budget - which this figure assumes - there would be a corresponding reduction in the Street Lighting energy budget allocation, so no financial impact).
		Energy	UTC £7000; UTC ESS £1000; Prefect £2,500; RMS £3000; RMS ESS £500; IC4 £1200; Paramics £1000; Wisnet £5000
		System support	BT RMS £50000; Virgin RMS £5500; O2 RMS £8000; BT UTC £70000; ZEN UTC £1000; Vodaphone £500
		Telecommunications	

		<b>Routine Reactive Repairs</b>	Maintenance and repairs to information equipment
		<b>Replacement and Upgrades</b>	Asset renewal predominantly RTPI hardware migration
		<b>System support</b>	Software licensing and IT support
		<b>Telecommunications</b>	CCTV fibre, PSTN and ADSL lines, Orange leased lines and GPRS costs
<b>Signs and Street Furniture</b>	<b>Signs</b>	<b>Replacement</b>	All signs, bollards, marker posts.
		<b>Cleaning</b>	All sign faces
<b>Environmental</b>	<b>Grass</b>	<b>Visibility Sprays</b>	All visibility sprays as defined
		<b>Urban cutting</b>	All urban areas as defined
		<b>Rural cutting</b>	All rural areas as defined
	<b>Trees</b>	<b>Routine Reactive</b>	Reactive inspections and safety work
		<b>Routine Proactive and Planting</b>	Proactive route inspections + identified works and minimal new planting
	<b>Shrubs</b>	<b>Routine Reactive</b>	Maintenance of shrub beds as identified
	<b>Weeds</b>	<b>Spraying</b>	All footways, edgings and channels as defined
		<b>Pulling</b>	All injurious or hazardous weeds as defined
<b>Weather Emergencies</b>	<b>Depots</b>	<b>Maintenance - plant buildings and dumps</b>	
		<b>Rentals</b>	
	<b>Facilities</b>	<b>Service and materials/ Winter Maintenance</b>	
		<b>Hazard Clearance / Emergencies</b>	
<b>Other</b>	<b>Other</b>	<b>Tech Surveys</b>	
		<b>Management Systems</b>	
		<b>Other</b>	
		<b>Fees</b>	
		<b>Reserves</b>	

## ***Appendix B***

### **Strategic Level – Needs Based Budgeting criteria**

The following list prescribe the criteria and sub criteria used to assess and distribute budget at the strategic level.

**Safety:-** Accessibility, Claims received, Killed and seriously injured records, Safe use of the highway.

**Environmental:-** Ecology, Carbon footprint/Climate change, Congestion, Recycling/Waste minimisation.

**Economic:-** Supporting local business, Contractual, Whole life cost, Value for money.

#### **Qualitative &**

**Legislative:-** Targets and performance indicators, Corporate objectives County policies, Equalities, legal requirements.

**Customer Focus:-** Community need, Public perception, Member perception, Reputation.

The perceived minimum spend and the perceived optimum spend on each activity is assessed as a positive or negative influence on these criteria allowing a judgement of value to be made against any number of budget options. This in turn allows headline budgets for asset groups to be determined with a knowledge of the impact on key service areas that those decisions deliver.