# Dorset Highways Maintenance Plan 2015/16

# **KEEPING DORSET MOVING**













Dorset County Council





Highway Maintenance Plan

# Contents

| 1. | Introduction                                    | 9.    | Funding  | 13. | Winter Service and Emergency Response |
|----|---|-------|--|-----|---------------------------------------|
| 2. | Corporate Objectives                            | 10    | . Levels of Service  | 14. | Highway Emergencies                   |
| 3. | Highway Maintenance Policy                      | 11.   | . Network Resilience   | 15. | Licensing and consents                |
| 4. | Legal Framework                                 | 12    | . Asset Group Maintenance  | 16. | Enforcement                           |
| 5. | Network hierarchy                               | • • • | Carriageways<br>Footways / cycleways<br>Drainage<br>Bridges & structures                                   |     |                                       |
| 6. | Inspections, Surveys, Assessments and Recording | • • • | Safety fences<br>Verges, hedges<br>Trees<br>Non illuminated signs<br>Street lighting and illuminated signs |     |                                       |
| 7. | Asset Groups                                    | • • • | Road studs and markings<br>Traffic control<br>On street parking<br>Bus stops and shelters                  |     |                                       |
| 8. | Condition Data Collection                       | •     | Rights of Way  |     |                                       |



#### Introduction

The purpose of this Highway Maintenance Plan is to define Dorset County Council's policies and approach to maintenance of its highway assets, and define service levels for activities across the Service.

This supersedes a previous version of the Highway Maintenance Policy Plan that was published in April 2006.

The plan marks a move to the revised Code of Practice entitled 'Well Managed Highways', that is due for publication imminently, and reflects guidance promoted through the HMEP.

The plan typically documents the revenue maintenance activities, which includes reactive responses (ie to potholes, flooding, emergencies etc) and cyclic activities (planned gully emptying).

Larger scale maintenance linked to key asset strategies are documented in the Highways Asset Management Plan, though there may be references to capital maintenance as the two are closely linked.

#### **Corporate Objectives**

#### **Corporate Plan**

The Corporate Plan documents two main objectives:

- Enabling Economic Growth •
- Health, Wellbeing and Safeguarding

This plan supports the Forward Together Programme which will enable the County Council to deliver the best possible outcomes for people in Dorset, within available budgets.

#### **Highways Service Plan**

The Dorset Highways Service Plan sets out a number of key objectives and goals intended to 'Keep Dorset Moving'. In doing so, it will support the corporate aims and objectives.

#### **Highways Asset Management Plan (HAMP)**

Highway assets will be maintained in line with asset management principles, as documented in the Highway Asset Management Plan, and will be subject to longer term strategies that are linked to defined levels of service, which are dependent on seeking increased capital and revenue investment.

Based on these wider strategic aims in the HAMP, the Highways Maintenance Plan supports this document and sets out specific delivery plans of maintenance across the asset groups and also provides links to relevant maintenance policies.

The Highway Maintenance Plan also links to key asset management components in the update of asset inventory items.

#### **Highway Maintenance Policy**

#### Policy Statement: 'Keeping Dorset Moving'

"It is the County Council's policy to manage its highway assets in a condition that meets the essential needs of service users and is fit for purpose and safe, in order to fulfil its statutory obligations. The County's maintenance approach will incorporate asset management principles and build network resilience to mitigate the risks of extreme weather events on the availability of the network. It will secure links to communities, businesses, public amenities and the countryside; promoting the economy in Dorset and the wider region."

#### **Policy Objectives**

The objectives of the highway maintenance policy are:

- To comply with the statutory obligations of the authority to maintain the public highway;
- To be responsive to the needs of communities and highway users;
- To provide effective management of the highway network asset;
- To support the highway network strategy and integrated transport objectives:
- To support and add value where possible to wider policy objectives.
- To improve network resilience
- To deliver an efficient and effective • highways service



# **Highway Maintenance Plan**

To provide a transparent highways service ٠ that communicates these objectives to its stakeholders and the public

### Legal Framework

### Duty of care to highway users

The County Council has a statutory duty to maintain the public highway.

The specific national legislation and guidance relating to these duties are as follows:

The Highways Act 1980 (Section 41)

- Imposed duty to maintain highways deemed be Traffic Signs and General Directions 2002 maintainable at public expense
- In particular a highway authority is under a duty • to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.

### The Traffic Management Act 2004 (Section 16(1))

- · Securing the expeditious movement of traffic on the authority's road network
- Facilitating the expeditious movement of traffic • on road networks for which another authority is the traffic authority.

The Road Traffic Act 1988 (Section 39)

- Promoting road safety, •
- Conduct studies into accidents on roads •
- Implementing measures to prevent such ٠ accidents

Codes of Practice

- Highway Infrastructure Asset Management Guidance Document - HMEP May 2013
- Well Maintained Highways •
- Management of Highway Structures ٠
- Management Electronic of Traffic Equipment
- Well Lit Highways

Below is a list of Acts, which refer to powers, duties and standards for wider issues on the highway network.

- The Highways Act 1980 •
- Road Traffic Regulations Act 1984 •
- **Boad Traffic Act 1988** •
- . Road Traffic Reduction Act 1997
- The Transport Act 2000
- Wildlife and Countryside Act 1981
- The Environmental Protection Act 1990 •
- The Noxious Weeds Act 1959
- Rights of Way Act 1990
- Countryside and Rights of Way Act 2000
- The Railway and Transport Safety Bill 2003
- **Disability Discrimination Act 1995**
- The Ragwort Control Act 2003

### **Network Hierarchy**

Maintenance strategies have been formed on the basis of network hierarchies in line with the national Codes of Practice. To better manage the highway network and to set more representative levels of service, use is made of a network hierarchy which characterises the type of roads and footways found across Dorset and their use.

The network hierarchy reflects the needs and priorities of highway users and is determined by its use (eg a route to a hospital), its environment and pedestrian usage. Footway priorities may sometimes conflict with carriageway priorities. Therefore separate footway and carriageway route hierarchies are defined, as set out in the tables.

### Asset Inspections, Surveys, Assessments and Recording

### **Highway Inspections**

Based on the network hierarchy planned highways enhanced safety inspections which are carried out by inin-house inspectors in accordance with the Code of Practice for the Classification of Highway Safety Hazards & Defects. The frequency of these planned inspections depend on the carriageway and footway hierarchy in the following tables:

These inspections form the basis of the County Council's Section 58 defence under The Highways



## **Highway Maintenance Plan**

Act 1980, against claims by third parties for compensation, as a result of injury or damage to property.

Where there is both a carriageway and footway, the higher of the two hierarchies takes precedence for the purposes of inspections.

| DCC Network<br>Hierarchy | Category              | Inspection<br>frequency (per<br>year) |
|--------------------------|-----------------------|---------------------------------------|
| 1                        | Motorway              | n/a                                   |
| 2                        | Strategic Route       | 12                                    |
| 3                        | Main Distributor      | 12                                    |
| 4                        | Secondary Distributor | 12                                    |
| 5                        | Local Distributor     | 4                                     |
| 6                        | Collector Road        | 1                                     |
| 7                        | Minor Collector Road  | 1                                     |
| 8                        | Minor Access Road     | 1                                     |
| 9                        | Unpaved               | 0                                     |

Table 1 – Carriageway inspection frequency

| DCC<br>Footway<br>Hierarchy |     | Hierarchy<br>Description                                    | Inspection<br>Frequency<br>(per year) |
|-----------------------------|-----|---|---------------------------------------|
|                             | 1   | Strategic Footway   | 12                                    |
| ays                         | 2   | Distribution<br>Footway                                     | 4                                     |
| Footw                       | 3   | Secondary<br>Distribution / Busy<br>Local Access<br>Footway | 2                                     |
| 4                           |     | Local Access<br>Footway                                     | 1                                     |
| Table                       | 0 5 | huan in an action from                                      |                                       |

Table 2 – Footway inspection frequency

#### **Defects and Response Times**

The timing of repairs is determined by a risk evaluation that considers the following:

- Type of hazard / defect that has been identified
- Assessment of the risk impact rating
  - High Major / Serious impact;
  - Medium Noticeable impact; or
  - Low Minor impact.
- Assess risk probability linked to road hierarchy (ie use).
- Determination of a response category

|       | Network Hierarchy |             |    |    |    |    |    |    | hy |   |     |      |   |
|-------|-------------------|-------------|----|----|----|----|----|----|----|---|-----|------|---|
|       |                   | Carriageway |    |    |    |    |    |    |    |   | Foo | tway |   |
|       |                   | 2           | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 1 | 2   | 3    | 4 |
| រគ្គ  | High              | 1           | 1  | 1  | 2a | 2b | 2b | 2b | 2b |   |     |      |   |
| Ratin | Medium            | 2a          | 2a | 2a | 2a | 2b | 2b | 2b | 2b |   |     |      |   |
|       | Low               | 2b          | 2b | 2b | 2b | 2b | 2b | 2b | 2b |   |     |      |   |

This translates into the following response times :

| Category | Description             | <b>Response Time</b> |
|----------|-------------------------|----------------------|
| 1E       | Emergency               | 2 Hours              |
| 1        | Imminent                | 32 Hours             |
| 2a       | Scheduled - Short Term  | 7 Days               |
| 2b       | Scheduled - Medium Term | 28 Days              |
| 2c       | Planned                 | 6 Months             |
| 3        | Non-Safety Observation  | Not defined          |



| Asset Groups  |                |      |        |                  |                 |                 |             |                  |                  |        |          |
|---------------|----------------|------|--------|------------------|-----------------|-----------------|-------------|------------------|------------------|--------|----------|
|               |                |      | 1      | Verges,          | Urban Verges    | Km <sup>2</sup> | 2.5         |                  |                  |        |          |
| Asset Groups  | Typical Asset  | Unit | No     | Hedges,          | and Grassed     | Km              | 8,000       | Public Rights of | Footpaths        | Km     | 2,852    |
| <b>-</b> -    | Elements       |      |        | Fences, Trees    | areas           | No              | 60,000      | Way              | Bridleways       | Km     | 1,787    |
| Carriageways, | A Class roads  | Km   | 396    | and Landscape    | Rural or Semi   |                 |             |                  | Stiles and       | No     | 22,258   |
| Footways and  | B Class Roads  | Km   | 398    | Areas            | Rural Verges    |                 |             |                  | gates            | No     | 6,187    |
| Cycle liacks  | C Class roads  | Km   | 1,135  |                  | Trees           |                 |             |                  | Signs            |        |          |
|               | U Class roads  | Km   | 2,205  | Street Lighting  | Street Lights   | No              | 41,400      |                  |                  |        |          |
|               | Footways       | Km   | 2,138  |                  | Illuminated     | No              | 4,600       |                  |                  |        |          |
|               | Cycleways      | Km   | 145    |                  | Traffic Signs   |                 |             |                  |                  |        |          |
| Bridges and   | Road Bridges   | No   | 846    | Signing, Road    | Signs           | No              | 45,559      | Please note that | some of these in | ventor | y totals |
| Structures    | Foot Bridges   | No   | 93     | Markings,        | Road Markings   | Km              | 1,923       | are based on his | toric data.      |        |          |
|               | Retaining      | No   | 152    | Studs, Bollards  | Road Studs      | No              | 75,000      |                  |                  |        |          |
|               | Walls          | No   | 119    | Railinge         | (Catseyes)      | Km              | 19.6        |                  |                  |        |          |
|               | Heritage       | No   | 1      | nannigs          | Pedestrian      |                 |             |                  |                  |        |          |
|               | Structures     | Km   | 44     |                  | Guard Rails     |                 |             |                  |                  |        |          |
|               | Tunnels        |      |        | Traffic Control  | Traffic Signal  | No              | 309         |                  |                  |        |          |
|               | Crash Barriers |      |        | and Information  | Junctions       | No              | 237         |                  |                  |        |          |
| Drainage      | Gullies        | No   | 90,556 | Systems          | Pedestrian      | No              | 19          |                  |                  |        |          |
| -             | Manholes and   | No   | 16,658 |                  | Crossing points | No              | 27          |                  |                  |        |          |
|               | Catchpits      | Km   | 1,968  |                  | Variable        |                 |             |                  |                  |        |          |
|               | Drainage Pipes | Km   | 876    |                  | Message Signs   |                 |             |                  |                  |        |          |
|               | Ditches and    | No   | 357    |                  | Safety& Speed   |                 |             |                  |                  |        |          |
|               | Grips          | No   | 10     |                  | Cameras         |                 |             |                  |                  |        |          |
|               | Outfalls       |      |        | On Street        | Parking signs   | No              | 6,300       |                  |                  |        |          |
|               | Soakawavs      |      |        | Parking          | Parking         | Km              | 331         |                  |                  |        |          |
|               | and SUDS       |      |        | Facilities       | Markings        |                 | 10          |                  |                  |        |          |
|               | Pumping        |      |        |                  | Pay and         | NO              | 43          |                  |                  |        |          |
|               | Stations       |      |        |                  | Display         |                 |             |                  |                  |        |          |
|               |                |      |        | Street Eurpiture | Rue stope       | No              | 3 616       |                  |                  |        |          |
|               |                |      |        | Sheet Furniture  | Bus stops       | No              | 0,010<br>00 |                  |                  |        |          |
|               |                |      |        |                  |                 | INU             | 30          |                  |                  |        |          |

#### **Condition Data Collection**

Machine surveys are used to monitor and manage carriageway condition. These surveys are carried out by WDM Ltd as part of the South West Highways Condition Survey Collaboration.

#### SCANNER (Surface Condition Assessment of the National NEtwork of Roads):

This involves using a specialised survey vehicle to establish the condition of the carriageway, and is used to produce a Road Condition Index (RCI) 'score' which is used to report national indicators to monitor and compare performance.

This data is also used to make informed decisions about scheme identification, priorities and possible treatment It's also used to calculate and report on depreciated replacement costs (DRC) to satisfy Whole of Government Accounts (WGA), calculating the maintenance backlog and calculating future funding requirements.

SCANNER surveys are conducted on the A, B and C road network, with 100% of the A and B road network surveyed over two years, and 100% of the C road network collected over four years.

#### SCRIM (Sideways Coefficient Routine Investigation Machine - Skid resistance assessments):

SCRIM surveys are undertaken using a specialised vehicle, measuring skid resistance across the network. The survey data produces a Characteristic SCRIM Coefficient (CSC) which is compared to

required standards according the specific site, to then identify sections of highway where skid resistance should be restored or improved. Details of how this data is used to identify sites and how they are prioritised, is set out in Dorset's skid policy.

SCRIM surveys are conducted on strategic, main distributor roads and selected local distributor roads only, with 100% of those sections (in both directions) collected each year. They are assessed over a three year cycle of early, mid, and late season collection There are options for alternative surveys of the to take into account seasonal variations in the readings.



#### Deflectograph

This survey is a measure of the structural properties of a road. Currently we do not collect this data.

#### Other surveys

network including Coarse Visual Inspections (CVI) and Driven Visual Inspections (DVI) for carriageways.

In addition there are visual footway inspections including Footway Network Surveys (FNS). These have not been carried out in Dorset due to cost and concerns over use of the data. A similar footway condition survey has been sampled and is a Footway Maintenance Survey (FMS) which can be used for reporting and for feeding into works programmes.

Consideration is being given to utilising in house resources to conduct condition surveys that will help to inform future maintenance strategies and works programmes.



#### Funding

The delivery of the highway maintenance service is funded by two funding streams: 'revenue' and 'capital'.

Revenue funding - This covers the costs associated with planned and reactive (including emergency) maintenance of highway assets, to ensure the network is safe and accessible. The revenue budget is broken down into key areas as set out below:

- Service costs Costs attributed to staff time • for carrying out highway safety inspections, responding to complaints, enquiries, and in dealing with licences, enforcement, investigation, third party claims and dealing with legal matters.
- Planned maintenance These are cyclic ٠ maintenance activities such as grass cutting, grip /ditch clearance, gully emptying.
- Reactive maintenance These are activities • in response to highway safety defects or emergencies. Typical defects would include pothole repairs, flooding, or responses to emergencies following inspection, public enquiry or a road traffic collision.

Capital Funding – This funding is awarded through the maintenance block, formula funding by the Department for Transport. This provides funding for the design and construction / implementation of structural repairs and treatments that either extend the life of highway assets or replace those that are at the end of their serviceable life.

#### Department for Transport (DfT) Spending Plans

The DfT set out future spending plans for the next six years starting 2015/16, which commits to just under £6billion to highway maintenance.

However this is now made up of three elements:

Formula funding element - £4.75billion of this DfT funding calculated using the revised formula based on the extent of Dorset's carriageway and footway network and it bridges.

*Incentive element* – The DfT have made £580million of this funding incentivised, to encourage best practice and reward efficiencies and embedment of asset management.

Determination of banding will be through selfassessment.

|        | % of Incentive Element That Authorities Will Receive |         |         |         |         |         |  |  |
|--------|--|---------|---------|---------|---------|---------|--|--|
| Year   | 2015/16  | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |  |  |
| Band 1 | 100%   | 90%     | 60%     | 30%     | 10%     | 0%      |  |  |
| Band 2 | 100%   | 100%    | 90%     | 70%     | 50%     | 30%     |  |  |
| Band 3 | 100%   | 100%    | 100%    | 100%    | 100%    | 100%    |  |  |

Challenge Fund - The DfT have set aside £575million for large construction or maintenance schemes that includes collections of smaller schemes. Authorities were invited to bid for tranche 1, covering the first three years (2015/16, 2016/17 and 2017/18) in which Dorset's schemes were not considered a priority, but there will be the opportunity to bid again in January 2018 for tranche 2 (2018/19, 2019/20 and 2020/21).



#### Levels of Service

The revised Code of Practice defines levels of service in terms of four key areas. These will set out a standard associated with each asset that can be expected in terms of maintenance. These levels of standards will be defined by the following elements:

#### Network Safety ٠

Meeting statutory obligations Section 41 of the Highways Act 1980 Meet road users need for safety

Network Serviceability ٠

Ensure availability Achieve integrity Maintain reliability Enhance condition

#### Network Sustainability ٠

Minimising cost over time Maximising value to the community Maximising environmental contribution

These themes are combined to define a level of service across different highway assets and in some cases according to their location within the network hierarchy.

This table defines the level of service using colour coding to illustrate what features can be expected.

A further explanation relevant to each asset type, will also explain in more detail what level of maintenance can be expected.

Network safety, serviceability and sustainability

**Network safety and serviceability features** 

Network safety related issues only

#### **Customer Service**

Customer service will be a consistent feature across all highway assets and activities and consist of the following:

Delivery of satisfaction Provide effective consultation and communications Dealing effectively with enguiries and complaints



# **Highway Maintenance Plan**

#### **Network Resilience**

The network resilience project is intended to mitigate the risks to the network caused by extreme weather that might cause flooding, landslides, or impact on essential assets such as bridges and carriageways.

This will ensure the availability and integrity of those routes that form strategic links around the County and the south west region, plus links to essential services such as hospitals, emergency services, schools, energy centres, even in extreme weather events.

The routes are based on those already identified as those that form our winter salting routes and include both the precautionary salting routes and community link network.





Dorset's resilient network

Future maintenance strategies are linked to maintaining network resilience and scheme prioritisation is weighted towards assets on those routes.

This will be enhanced by work carried out in conjunction within the South West region and in collaboration with other South West highway authorities, Climate South West and Wilson Pymm May to develop a resilience toolkit.

This map based system is known as HIRAM (Highways Infrastructure Resilience Assessment Modelling Tool) and will be used to plot known highway issues on the resilient network.



This will then be used to prioritise future maintenance schemes, whilst also understanding the financial and economic impacts caused by disruption on this network.

This may also be used to support bidding processes for additional funding in the future.





# **Highway Maintenance Plan**

#### Asset - Carriageways

The objective is to maintain a carriageway network that is safe and fit for purpose, and provides links to businesses, services and communities, and to facilitate tourism in the County.

#### Activities

Revenue – Emergency, and safety defect repairs

Capital – Planned treatments including resurfacing, reconstruction, surface dressing, patching, rejuvenation, retexturing, in-situ and ex-situ recycling.

#### Maintenance

**Revenue** - The frequency of carriageway inspections will be in line with 'table 1', and the response times will be in line with the Code of Practice for the Classification of Highway Safety Hazards and Defects.

Revenue repairs will be a combination of the following:

Conventional patching – Cut out and reinstated with hot material.



Infra Red Nu Phalt patching – Road surface heated, additional aggregates or binder as appropriate, then compacted, provide a seamless joint.



Velocity patching – combination of bitumen and aggregate sprayed, then compacted. Quick and cheap repair, but temporary.



**Capital** – In line with Dorset's strategic asset management approach capital maintenance

programmes will include a balance of early life interventions / treatments, combined with end of life replacement where high levels of reactive defects are evidenced.

Skid resistance is managed in line with the County's skid policy.

#### Levels of service

| Hierarchy | Description              | Level of Service |
|-----------|--------------------------|------------------|
| 2         | Strategic<br>Route       |                  |
| 3         | Main<br>Distributor      |                  |
| 4         | Secondary<br>Distributor |                  |
| 5         | Local<br>Distributor     |                  |
| 6         | Collector Road           |                  |
| 7         | Minor Collector<br>Road  |                  |
| 8         | Minor Access<br>Road     |                  |
| 9         | Unpaved                  |                  |

#### Performance Measures

Road condition (RCI), % SCRIM deficient, recorded defect trends, NHT Surveys, Citizens Panel. Safety – Number of KSIs



# Highway Maintenance Plan

| Level of Se   | <u>rvice Defined - Carriageways</u>   | Exa |
|---|---|-----|
| Safety ,<br>Serviceability<br>and<br>Sustainability | Undertake condition surveys needed for<br>national reporting and decision making.<br>Undertake safety inspections and deliver<br>a standard of maintenance required to<br>ensure the availability, integrity, reliability<br>and enhancement of condition of the<br>carriageway, whilst minimising costs,<br>maximising value and environmental<br>contribution through application of sound<br>asset management. Repairs will typically<br>be permanent (NU Phalt and<br>conventional patching). |     |
| Safety and<br>Serviceability                        | Undertake condition surveys needed for<br>national reporting and asset<br>management decision making.<br>Undertake safety inspections and deliver<br>a standard of maintenance required to<br>ensure the availability, integrity and<br>reliability of the carriageway.<br>Repairs may be a combination of semi<br>permanent (velocity) and permanent<br>repairs (Nu Phalt and conventional<br>patching).   |     |
| Safety<br>Related<br>Issues only                    | Undertake limited condition surveys and<br>safety inspections. Repair defects that<br>present an immediate hazard only.<br>Repairs may be restricted to velocity<br>patching. Planned treatments will be<br>restricted and dependant on available<br>budgets, but may consist of surface<br>dressing, microasphalt, and slurry<br>sealing.  |     |

### ample





Unpaved unclassified roads are not routinely inspected and are only repaired to a standard that is appropriate to their use. Repairs are ad hoc, but if not cost effective to repair they may be closed.



#### Asset – Footways and Cycleways

The objective of the footway and cycleway asset is maintain a network for pedestrians and cyclists to provide a safe environment that promotes alternative travel choices, that subsequently promote healthier lifestyles and reduce congestion and pollution.

#### Activities

Revenue - Emergency, and safety defect repairs

Capital – Resurfacing, reconstruction, slurry sealing, patching, recycling.

#### **Current Maintenance**

Revenue - Footways are routinely inspected within the frequencies documented in 'Table 2'. Where these are joint cycleways, then the same applies.

Footway and cycleway safety defects are repaired in line with the CoP for the Classification of Highway Safety Hazards & Defects.

Capital - A programme of slurry sealing is commissioned each year, with resurfacing and patching also considered depending on available budgets.

Future maintenance strategies are documented in the HAMP Volume 2 for footways and cycleways.

Where footways and cycleways form part of a shared surface with carriageways they will be maintained to the standard required of a footway.

#### Surfaces Levels of Service

| DCC Footway<br>Hierarchy |   | Hierarchy<br>Description                                       | Level of<br>Service |
|--------------------------|---|--|---------------------|
|                          | 1 | Strategic<br>Footway   |                     |
|                          | 2 | Distribution<br>Footway  |                     |
| Footways                 | 3 | Secondary<br>Distribution<br>/ Busy Local<br>Access<br>Footway |                     |
|                          | 4 | Local<br>Access<br>Footway                                     |                     |



#### Performance Management

FMS / Inspector reports, Recorded defect trends, NHT Surveys, Citizens Panel



# <u>Level of Service Defined – Footways and</u> <u>Cycleways</u>

| Safety ,<br>Serviceability<br>and<br>Sustainability | Undertake condition surveys needed for<br>national reporting and decision making.<br>Undertake safety inspections and<br>deliver a standard of maintenance that<br>to ensure the availability, integrity,<br>reliability to include enhancement that<br>will promote the use of footwayand<br>cyleways, whilst minimising costs,<br>maximising value and environmental<br>contribution through application of<br>sound asset management. |  |
|---|--|--|
| Safety and<br>Serviceability                        | Undertake condition surveys needed for<br>national reporting and asset<br>management decision making.<br>Undertake safety inspections and<br>deliver a standard of maintenance<br>required to ensure the availability,<br>integrity and reliability of the footway.<br>conventional patching)  |  |
| Safety<br>related<br>issues only                    | Undertake limited condition surveys and<br>safety inspections. Repair defects that<br>present an immediate hazard only.<br>Repairs may be semi permanent ie not<br>match the surface (ie tarmac used in<br>modular footways)   |  |









#### Asset – Drainage

The objective of the drainage asset is to maintain a drainage asset capable of efficiently removing surface water from the highway to maintain highway safety.

It is also to prevent the formation of 'ponding' of water on the highway network that may penetrate the fabric of the carriageway leading to the early onset of failure.

Assets include culverts, gullies, piped drainage, filter drains, grips, ditches, soakaways, catchpits, and attenuation ponds

#### Activities and Objectives

Revenue – Emergency, ad hoc and planned cleansing, emptying, de-silting, jetting. Flood response.

Capital – Pipe replacement/enhancement, replacing grips, drainage improvements

#### Important note

The statutory duty placed on the authority (Sect 41 of the Highways Act 1980), to maintain the public highway extends to repairing and maintaining highway drainage (*DfT, Environment & the Regions v Mott MacDonald Ltd, Amey Mouchel Ltd and Cornwall CC* - 27th July 2006)

#### **Current Maintenance**

*Gullies*: Scheduled emptying and de-silting of 60,000 gullies are carried out annually on the priority and community salting routes only (*EOC approval Nov 2014*).

Gullies on non-salting routes (30,000) are dealt with on an ad-hoc basis following routine inspections in accordance with the CoP for the Classification of Highway Safety Hazards & Defects.

Grips – Re-cut every two years.

All other drainage assets – Maintained is carried out on an ad-hoc basis following routine inspections and in response to flooding or safety hazards, and in accordance with the CoP for the Classification of Highway Safety Hazards & Defects.

There are no planned schedules to maintain manholes, catchpits, soakaways, ditches or balancing ponds.

There is also no planned schedule of jetting activities to piped drainage. This is carried out on an adhoc basis in response to flooding causing a hazard on the highway network.

#### Levels of service

| Network   | Level of Service |
|---|------------------|
| Resilient network<br>(Priority salting routes<br>and community link<br>roads) |                  |
| All other routes  |                  |

#### Performance Management

With designs to move to a needs based approach, data is collected as to how full gullies are at the time they are emptied.





## **Highway Maintenance Plan**

#### Levels of Service Defined - Drainage

| Safety ,<br>Serviceability<br>and<br>Sustainability | Scheduled routine maintenance of all<br>highway drainage assets to include<br>gullies, ditches, grips, pipework,<br>manholes, catchpits, soakaways,<br>attenuation ponds etc.<br>These will be based on a five year<br>programme of maintenance (ie 20% per<br>year) and support asset management<br>strategies linked to carriageways and<br>footways. Capital programmes will<br>consist of drainage improvements to<br>flooding hotspots. |  |
|---|--|--|
| Safety and<br>Serviceability                        | Scheduled routine maintenance of<br>gullies and grips only. Frequency of<br>emptying is annually for rural and urban<br>gullies.<br>Grips are recut every two years. Follow<br>up maintenance to blocked pipework<br>will be done on an ad hoc basis but<br>dependant on location, environment,<br>and maintenance history.<br>Restricted programme of drainage<br>improvements made to flooding<br>hotspots to include property flooding.   |  |
| Safety<br>related<br>issues only                    | Reactive maintenance only to drainage<br>assets, in response to reports of<br>flooding.<br>Priority of treatments will be depend on<br>extent of problem, and incidents of<br>property or highway flooding and<br>hierarchy.   |  |





#### **Asset - Safety Fences**

The objective is to ensure that safety fences are in a condition that protects the safety of road users

#### Activities

Revenue - Safety fences are maintained through routine inspections and maintenance, and to replace sections damaged by road traffic collisions.

Capital – There are currently no planned programmes of planned safety fence renewal. Further details are documented in the HAMP.

#### .Current Maintenance

Where reports of damaged safety fence is reported responses are in line with the Code of Practice for the Classification of Highways Safety Hazards and Defects.



#### **Asset - Bridges and Structures**

#### Activities

Revenue – Inspection of highway structures, asset and programme management for structures, accident repairs (non-recoverable),vegetation removal (seasonal / scrambling over structure ),removal of blockages to flow ( trees and other debris), silt clearance within the extents of structures, removal of graffiti, clearing drainage, cleaning of expansion joints.

Capital - Pointing of masonry structures, mortar repairs to reinforced concrete structures (protecting steel reinforcement), replacement of mortar bedding to loose masonry (parapets and copings), painting of steel structures, renewal and repair of guardrails (handrails, parapets, approach fencing all materials), removal of shrubs rooted into structures, river bed work to prevent undercutting of foundations, replacement of non-slip coating on footbridge deck (full or partial), timber replacement on footbridge (full or partial), structural assessment, strengthening and replacement.

#### Current Maintenance

Bridges, Footbridges, Culverts, Subways and Tunnel – All 1226 subject to a general inspection every 2 years, 10% of stock, based on risk assessment, given detailed principal inspection every 6 years. Maintenance prioritisation based on Highway Maintenance Plan

condition and extent of defects identified by inspection.

Retaining Walls – Most are not formally inspected. The 125 walls currently on the inventory for inspection were selected historically based on height, sensitivity of location and poor condition. Inspections every 2 years. Maintenance prioritisation is based on condition identified by inspection and is reactive to ad hoc reports of problems with walls that are not inspected.



#### Levels of Service

All County roads

| Safety,<br>Serviceability<br>and<br>Sustainability | Undertake condition surveys needed for<br>national reporting and asset management<br>decision making. Undertake safety inspections<br>and deliver a standard of maintenance<br>required ensuring condition, availability,<br>reliability and enhancement of all types of<br>highway structures, whilst minimising costs,<br>maximising value and environmental<br>contribution through application of sound asset<br>management. Repairs will typically be<br>permanent (replacement or upgrade of bridge<br>elements)   |
|--|--|
| Safety and<br>Serviceability                       | Undertake condition surveys needed for<br>national reporting and asset management<br>decision making. Undertake safety inspection<br>and deliver a standard of maintenance<br>required to ensure condition, availability and<br>reliability of all types of highway structures.<br>Repairs associated with a routine maintenance<br>regime, generally undertaken on a 12 monthly<br>basis, includes items such as removing graffiti,<br>removing vegetation, cleaning/clearing/de-<br>greasing of different bridge components and<br>removing debris and silt from culverts. |
| Safety<br>Related<br>Issues only                   | Undertake routine condition surveys and<br>safety inspections. Repair defects that present<br>an immediate hazard only. Repairs may<br>include removal of debris blocking the flow<br>through bridges and culverts. Defects may be<br>identified via inspection or received in from the<br>public. These may require repairing as the<br>result of events such as vehicle impacts,<br>floods, vandalism and other types that may be<br>deemed as a safety issue.   |

#### Performance Management

Condition of all elements of structures and BCI of the bridge stock.

#### Asset – Verges and Hedges

This asset is maintained through scheduled and ad hoc cuts to enhance and contribute to the diverse landscape character of Dorset and provide important habitats for birds, mammals, invertebrates.

Cutting is also scheduled to remove safety hazards caused by encroachments that narrow or obstruct the highway and to prevent the obstruction of sight lines.

Dorset's verges form an extensive grassland habitat of significant environmental, social and economic value

#### **Current Maintenance**

Verges at the side of 'urban roads' (A and B class roads) will be cut six or seven times a year in order to maintain safety for all road users. Verges at the side of rural roads (C and D class roads) are cut twice a year with flail mowing usually taking place in May/June and August/September.

Mowing starts usually in mid-March and continues cyclically every three or four weeks depending on the weather and ground conditions e.g. during periods of heavy or continued rainfall this will interrupt the work schedule and longer grass will occur.

**Highway Maintenance Plan** 

There is no planned side verging programme in place.

#### Level of Service

All County roads

| Provision of safety,<br>serviceability and<br>sustainability | To have a scheduled programme<br>of grass cutting that optimises<br>the attractiveness and<br>biodiversity, in terms of the<br>frequency of cuts and also the<br>removal of cuttings, removal of<br>topsoil and replanting of verges<br>with low growing species and<br>natural retardants. |
|--|---|
| Provision of safety<br>and serviceability                    | Scheduled cutting of grassed<br>areas, including visibility splays,<br>to an agreed number of cuts per<br>year. Not to include the removal<br>of cuttings.  |
| Provision of safety<br>only                                  | Scheduled maintenance of 1-1.5<br>metres of verge only, leaving<br>remaining verge uncut. Also to<br>include cutting of visibility<br>splays. Cuttings not removed.   |

#### **Asset - Trees**

#### Activities and Objectives

Activities include routine inspections, pruning, removal, and re-planting. Also included are emergency responses to fallen trees obstructing the highway.

The objective is to prevent trees becoming a danger to motorists or property, and to prevent obstructions of the highway

#### **Current Maintenance**

Trees are currently maintained in line with the County's Tree Policy. The over arching aims of the Policy is to ensure a consistent approach to the management of trees in school grounds, in other County Council property and on the highway.

Established trees will be retained and managed with a view to providing a sustainable, high quality, safe, tree population, adding to the quality of the landscape.

All County Council owned trees shall be inspected according to their agreed inspection regimes (every 5 years for roads, every 3 years for schools and other council establishments).

The County Council will undertake a cyclical pruning regime of its trees requiring such treatment. The practice of pollarding will cease except where it

Highway Maintenance Plan

is needed to maintain old pollards or create veteran trees.

#### Asset – Non Illuminated Traffic Signs

Road signs; regulatory, information, warning, directional (including fingerposts)

#### Activities and Objectives

Revenue – Sign cleaning, refurbishment, or renewal/replacement

Capital – Replacement of directional signing, to enhance or to comply with current standards.

The objective is to provide visible and legible signing in relation to road use, warnings, speed limits and direction.

This will enhance user experience and improve safety features.

#### **Current Maintenance**

There is currently no programme of planned sign cleaning on any road signs current, and the approach to maintenance of highway signs (including non-illuminated bollards) is in accordance with the CoP, which means the repair and replacement is restricted to regulatory and warning signs only. Directional signs are not maintained unless their condition poses a hazard to highway users. In this case damaged signs will be removed.

There are some self-help parish schemes in place to fund and manufacture finger posts to maintain their condition. This is being done in collaboration with the AONB.

#### Levels of Service

| Hierarchy | Description              | Level of Service | - |
|-----------|--------------------------|------------------|---|
| 2         | Strategic Route          |                  |   |
| 3         | Main Distributor         |                  |   |
| 4         | Secondary<br>Distributor |                  |   |
| 5         | Local Distributor        |                  |   |
| 6         | Collector Road           |                  |   |
| 7         | Minor Collector<br>Road  |                  |   |
| 8         | Minor Access<br>Road     |                  | i |



#### Levels of Service Defined – Non illuminated signs

S

Se

aı Sı

| ifety ,<br>erviceability<br>nd<br>istainability | In addition to scheduled inspections,<br>condition data is collected to inform a<br>programme of sign replacement of<br>those at the end of their useful life. All<br>signs routinely cleaned, are cleared of<br>obstructions and legible.                                    |
|---|---|
| fety and<br>rviceability                        | Scheduled safety inspections carried out<br>according to hierarchy. Reactive<br>maintenance to hazard and regulatory<br>signs with an annual programme of sign<br>cleaning, and removal of foliage.   |
| ifety<br>lated<br>sues only                     | Scheduled safety inspections carried out<br>according to hierarchy. Reactive<br>maintenance to Cat 1 and 2.1 defects<br>only, typically to hazard warning and<br>regulatory signs only. Remedial works to<br>other signs limited to those posing an<br>immediate hazard only. |

Maintenance

emergency cover.

emergency cover.

Asset - Street Lighting and Illuminated Sign

signs are maintained to a satisfactory standard

the County Council employs a service provider

via a Private Finance Initiative (PFI) contract,

let in 2006. In general, this contract covers all

aspects of the service including areas such as routine maintenance, electrical testing, night

scouting, non-routine repair, random repairs,

To ensure that street lights and illuminated

signs are maintained to a satisfactory standard

the County Council employs a service provider

via a Private Finance Initiative (PFI) contract,

let in 2006. In general, this contract covers all

aspects of the service including areas such as

routine maintenance, electrical testing, night

scouting, non-routine repair, random repairs,

new works, structural maintenance and

new works, structural maintenance and

To ensure that street lights and illuminated

## Asset – Road Studs and Markings

#### Assets

Road markings: Edge and centre lines, roundels, junction markings, safety features. Road studs

#### Activities

Replacement and refreshment of markings and road studs

These assets are intended to provide visual delineation and provide messages and warnings to road users to promote highway safety.

#### **Current Maintenance**

Revenue - Safety features replacement in accordance with the CoP for the Classification of Highway Safety Hazards & Defects

Capital - A programme of capital funded replenishment, targeting primarily the strategic and main distributor routes, is implemented. Annual programmes of line replacement are based on the findings of Ecodine surveys, measuring the reflectivity of the lines. This survey is based on centre line markings only.

Line replacement is typically restricted to junction marking, centre lines and other safety featrures.



Access protection markings - An application can be made to protect a vehicular access, though they are unenforceable, 'courtesy' markings.

# **Highway Maintenance Plan**

#### **Asset - Traffic Control**

#### Activities and Objectives

Maintenance consists of ongoing replacements and repairs due to the age of the equipment, including emergency repairs

The objective is to allow the safe passage of both pedestrians and vehicles on the county network and to manage traffic flows and help prevent congestion.

#### **Current Maintenance**

**Revenue** – A contract is in place with Siemens Traffic Control, which covers any faults reported on the equipment between 06:00 - 19:00. Priority 1 faults repaired within 4 hours. e.g. All lamps out.

Priority 2 faults repaired within 13 hours. e.g. red lamp out.

One annual inspection per site, per year identifies any chargeable repairs required; e.g. rusting signal head brackets and signal posts. These chargeable faults are issued to Siemens Traffic Control for their action.

**Capital** – There is currently no programme of capital renewal of traffic control assets. Strategies linked to renewal are being developed and will be documented in the HAMP.

#### Levels of Service

Every site is treated equally for safety purpose however we have ten priority sites which are attended as Emergency Call Outs and must be attended within 2 hours. The Traffic Signal Standby Engineer may invoke this service 24 hours a day.

| Hierarchy | Description  | Level of<br>Service |
|-----------|--|---------------------|
| 1         | 10 Priority Sites<br>RTI major damage<br>Urgent repairs as<br>result of PI |                     |
| 2         | Signals/Crossing All<br>Out<br>RTI minor damage                            |                     |
| 3         | Minor Faults<br>Minor repairs as result<br>of PI                           |                     |

| Safety Serviceability<br>and<br>Sustainability | Emergency<br>attendance within 2<br>hours as dictated by<br>Term Maintenance               |
|--|--|
| Safety and<br>Serviceability                   | Priority 1 faults<br>reported will be<br>attended and fixed<br>within 4 contract<br>hours. |
| Safety Related Issues only                     | Priority 2 faults will be attended and fixed within 13 hours.                              |

#### Performance Measures

Southwest Key Performance Indicators.

Siemens Traffic Control reports from Fault Management Systems.

#### Performance Management

Number of faults received.

Number of repeat faults received.

Number of Chargeable works required as a result of annual inspections by Siemens Traffic Control.



# Highway Maintenance Plan

### Asset - On Street Parking

Assets consist of parking signs and lining, and onstreet pay and display machines.

The objective is to prevent obstructions on the public highway to reduce the risk of congestion and improve safety of all road users.

#### **Current Maintenance**

**Revenue** - Pay and display machines are inspected annually. Any defects are repaired on a reactive basis.

There are no planned inspections or maintenance to parking signs and lines.

**Capital** – A capital renewal programme is being identified and documented in the HAMP.

Both revenue and capital activities are funded through surplus income that is set aside.



# Asset - Street Furniture – Bus Stops and Shelters

These assets are intended to identify points at which bus services pick up and drop off, and in the case of shelters to provide a structure where people can wait for services where they are sheltered from the elements.

The objective is to encourage the use of public transport as an alternative method of travel, and also to ensure the assets are suitable for those that rely on bus services to get to work, school or for recreational purposes.

#### **Current Maintenance**

**Revenue** - Bus shelters are cleaned on a planned schedule once per month at busy locations, and quarterly for all other sites.

There are no planned inspections of bus shelters, however maintenance is conducted in response to reports of vandalism or damage caused by road traffic collisions.

Bus stops including the plates are not routinely cleaned or cleared of vegetation.

**Capital** – There is currently no capital funding towards replacement of poles, flags and bus shelters. An end of life strategy is being developed

for this asset group that will be documented in the HAMP.



# **Highway Maintenance Plan**

#### Asset - Rights of Way

The rights of way asset is a combination of footpaths, bridleways, trailways and byways that provide access to Dorset's countryside.

The asset group is made up of these surfaces but also includes bridges, handrails, gates, stiles and directional signing.

The objective is to promote health, safety and wellbeing by encouraging people to get outdoors and be active by providing alternative routes, whilst promoting Dorset's natural environment that feeds the economy through tourism.

#### **Current Maintenance**

Maintenance is a combination of planned and reactive work, based on public safety and being able to access these routes. This may also include enforcement where obstruction or encroachments come from private hedges and crops, or where landowners restrict access by other means.

Maintenance activities include surfacing works and clearance of vegetation and other obstructions from the surface of the right of way and repairing or replacing gates, stiles and bridges.

Works are prioritised in line with the County RoW priority system, which ranks the priority of the

remedial works from a 1 (response within 24 hours) to 7 (when resources permit).

| Completion of works is dependent on its ranking and against available budgets and resources.                | holiday season or on other route<br>Other encroachment/obstruction with no alternative route<br>on popular* route . |
|---|---|
| PRIORITY 1 FIRST INSPECTION WITHIN 1<br>WORKING DAY 1   | PRIORITY 5 - FIRST INSPECTION WITHIN 6<br>MONTHS 182  |
| Accident/Incident where serious injury has occurred   | Defect with non Dorset County Council structure   |
| Any matter that poses an immediate serious danger to the public   | Overgrown vegetation on other** route   |
| Electric fencing or barbed wire across or adjacent to a public bridleway, such that it constitutes a bazard | Add to winter/summer maintenance schedule   |
| PRIORITY 2 FIRST INSPECTION WITHIN 1  | Vegetation (side growth/overhanging) obstructing access   |
| WEEK 7  | Missing/damaged signpost  |
| Potentially dangerous bridge structure  |   |
| Dangerous animal on public right of way   | Repeated harassment and intimidating behaviour or notices   |
|   | PRIORITY 6 FIRST INSPECTION WITHIN 12   |
| WEEKS 14  | MONTHS  |
| Defect with DCC structure (gate or stile.   | Sunace damage on other Todle  |
|   | Electric fencing without crossing aid/warning sign on   |
| Crops on popular* route – reported in peak season (June – September)  | footpath.   |
| Note: all paths in this category MUST be on the summer  | PRIORITY 7 WHEN RESOURCES PERMIT  |
| maintenance schedule.<br>Overgrown vegetation on popular* route in peak holiday                             | Missing waymark   |
| season (June – September)   | Encroachment/obstruction on other** route with reasonable alternative   |
|   | New requests for handrails/steps/boardwalks/etc   |

**WEEKS** 

**PRIORITY 4 FIRST INSPECTION WITHIN 8** 

Crops and/or ploughing on popular route outside peak

Surface damage on popular\* route

56



#### **Activity - Winter Service**

This refers to the preparations and treatment of ice and snow on the public highway to facilitate the safe movement of vehicles and maintain important links within the County, during adverse winter weather conditions.

This operates from 1<sup>st</sup> October – 30<sup>th</sup> April.

#### Activities

Decision making and subsequent salting actions, based on daily winter weather forecasts.

Salting and ploughing during periods of snow.

#### Levels of Service

| Network                    | Level of Service |
|----------------------------|------------------|
| Priority salting<br>routes | 2                |
| Community link<br>roads    | 2                |
| All other routes           | 4                |

#### Policy

Dorset's policy and approach is documented in the Winter Service Plan which is based on the guidance documented in Appendix H (amended 2014). This document is produced annually to reflect any updates or amendments.



The road network is divided into three priorities for the purpose of winter service treatment:

**Priority salting routes** – These provide important links both within the County and neighbouring authorities to facilitate movement of vehicles within the south west region.

**Community link roads** – These routes link the priority salting routes to communities. These routes are treated in the event of prolonged icy conditions or snow fall.

**All other routes** – These receive no planned treatment.

Details of routes and actions can be found on the attached link.

#### http://mapping.dorsetforyou.com/traveldorset/sever e-weather/gritting

Arrangements with farmers are in place with snow ploughs for clearance of local roads during snow conditions.

#### **Activity - Highway Emergencies**

Responding to emergencies; including road traffic collisions, highway flooding, fallen trees, landslips, and anything else causing an obstruction of the highway.

It also consists of managerial, technical, equipment and manpower assistance in wide scale emergencies such as a chemical spill, major pollution or other civil emergency.

#### **Current Policy**

Dorset Highways staff will respond to an emergency situation, as far as is practicable, within one hour of receiving notification of the emergency to either make safe, effect a repair or otherwise deal with the emergency.

## Activity - Licensing and Consents

### Policy

Dorset Highways will require all activities on, or affecting the highway, to be controlled and authorised by way of licensing.

Activities and items subjected to approval include the following:

- Skips
- Scaffolding
- Building materials
- Hoarding
- Sitting out arrangements (tables and chairs)
- Temporary traffic signals
- Section 50 Road opening
- Banners
- Planting / cultivation of the highway

Further details can be found on the Dorsetforyou webpage. <u>https://www.dorsetforyou.com/travel-</u> <u>dorset/roads-and-driving/request-a-road-</u> <u>service/licensing-highway-obstructions-and-private-</u> streetworks.



### **Activity - Enforcement**

#### Policy

Dorset Highways may pursue enforcement action in line with current policies, against those responsible to ensure the highway is kept free and unobstructed. In most cases this will be without the need for formal action and individuals will be requested to take remedial action.

However where necessary the authority may use its powers to prevent, enforce and in some cases, prosecute individuals.

## Obstructions or vegetation overhanging the

**public highway** – The County Council has powers to prevent those responsible for causing such obstructions. Where non-compliance is encountered the authority may arrange for items or hazards to be removed, and the costs recovered.

Further information on policies relating to specific items are set out below.

**A Boards** – Dorset Highways supports the placement of A-boards on the public highway recognising the importance to local businesses, but as long as they do not create a nuisance or a hazard.

**Temporary event direction signs** - Organisers of any temporary event lasting up to seven days and expected to attract more than 500 people per day must apply to Dorset County Council for temporary event direction signs.

**Unauthorised Signs** - Unauthorised signs are not allowed on the highway and can be removed without notice by the county council and stored.

Further information on these items can be found on the link below.

https://www.dorsetforyou.com/travel-dorset/roadsand-driving/road-information/trafficmanagement/road-signs-and-markings

