Appendix 3

Cambridgeshire County Council

Cambridgeshire County Council's

Highway Infrastructure Asset Management Plan 2017 - 2027

February 2017

Cambridgeshire County Council's

Highway Infrastructure Asset Management Plan

CONTENTS

Appendices

1. Introduction

1.1 This Highway Infrastructure Asset Management Plan (HIAMP) sets out howCambridgeshire County Council manages and maintains the highway infrastructure for which it is responsible. It brings together the County Council Corporate and Local Transport Plan (LTP)objectives. This Plandetailshow the principles of asset management will be increasingly used to ensure that the HighwaysService meets the requirements of its users and delivers value for money.

1.2 The Department for Transport (DfT) document *'Gearing up for efficient highway delivery and funding'*, published in January 2014,identifiedhow highway maintenance funding waslikely to be allocated in the future.It suggestedthat authorities whichhave a highway asset management plan in place, and can demonstrate its use, will be incentivised through a revised highway maintenance fundingformula. An Incentive Funding stream was implemented from 2016/17. The amount of funding that authorities receive from this source is dependent upon the extent to which they have implemented the asset management approach. The potential funding available to the Authority from this source is £9,628,000 for the years 2016/17 to 2020/21. However, Cambridgeshire could lose up to £7,122,353 if we fail to adequately implement a robust asset management approach. ThisPlan plays an essential role in securing and maximising long term capital funding for the maintenance of Cambridgeshire's highway network.

1.3 A new national Code of Practice "Well Managed Highway Infrastructure" was published in October 2016. This supersedes the previous Codes, published in 2005, which included "Well Maintained Highways". The new Code contains fewer prescriptive standards and promotes a more risk based approach. The new Code provides a period of up to two years to make the transition to the new approach. Many of the standards in this Plan reflect the 2005 Code of Practice. Where moves have been made towards a more risk based approach, these are identified within this Plan.

1.4 This Plan, along with the Highway Asset Management Policy and Strategy, demonstrates the Authority's commitment to highway asset management viaan approach that is tailored to Cambridgeshire's needs, whilst also recognisingnational best practice.The Plan sets out how progress in implementing the asset management approach is monitored.The integrated approach promoted throughout the Plan enables the consideration of the wider issues associated with the management of the county's transport network, such as sustainability and growth pressures.

1.5 Cambridgeshire's highway network is by far the most valuable asset for which the County Council is responsible, with a replacement cost in the order of £10.6 billion (depreciated replacement cost, in accordance with Whole of Government Accounts principles).The highway assets covered by this plan are outlined in Section 2.

1.6 The purpose of this Plan is to:

- Define affordable highway service standards
- Publish investment and maintenance strategies for key highway asset groups
- Improve the way in which the county's highway are managed and maintained

- Enable the delivery of value for money through efficient and effective highway service provision

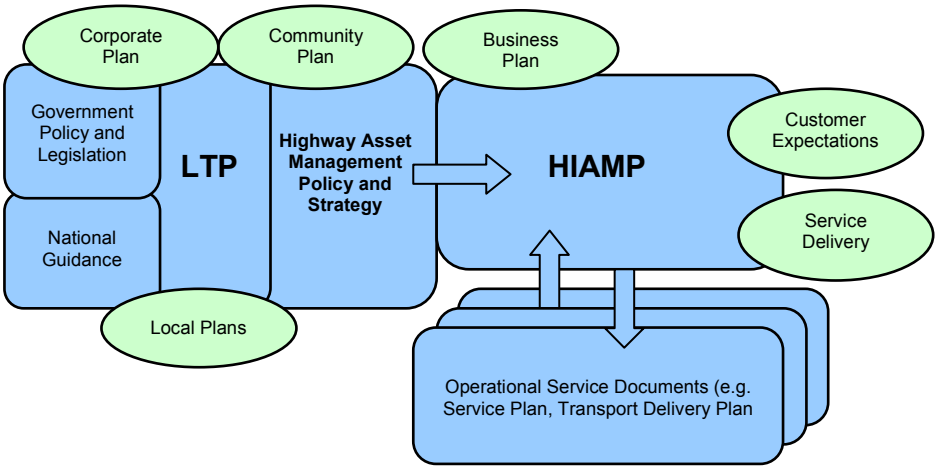
1.7 This Plan covers the period 2017 – 2027.It has been produced in accordance with national guidance provided by the Highway Maintenance Efficiency Programme (HMEP) - 'Highway Infrastructure Asset Management' and 'Prevention and a Better Cure'.

Fig 1: HMEP Guidance documents

1.8 This Plan covers the development, maintenance and operation of Cambridgeshire's highway network.

1.9 This Plan is a key operational document that is linked intrinsically to other County Council policies and processes. This relationship is illustrated in the Systems Diagram below.

Fig 2: Asset Management Systems Diagram



2. Asset Descriptions

2.1 The official records of the overall status and extent of Cambridgeshire's public highway assetare managed within the Highways Service.

2.2 A summary of the main asset groups covered in this Plan is provided in Figure 3 below:

Fig 3: Summary of Assets Managed

Asset Group	Element	Quantity
Carriageways	A Road B Roads C Roads Unclassified Roads Soft Roads(unmade/green lanes) **Total** Cycletracks Fords & causeways Traffic Calming features Anti-skid	424 km 568 km 1114 km 2266 km 133 km **4,505km** 64km 7 no 1,682 no 29km
Footways and cycleways	Cat 1a Footways Cat 1 Footways Cat 2 Footways Cat 3 Footways Cat 4 Footways (estimate) **Total** Permissive paths (excluding cycleways)	29km 48 km 100 km 122 km 2,077km **2,376 km** 641km
Structures	Pedestrian / cycle bridges Road bridges Retaining Walls Underpass / subway Signal Gantry sites PROW structures (over 5m)	142 no 908 no 68 no 17 no 5 no approx. 2200no
Street Lighting	Street Lights Illuminated signs and bollards	57,201 no 5,896 no
Intelligent Transport Systems (ITS)	Traffic Signals - Junctions Traffic Signals – Crossings Variable message signs Vehicle Activated Sign Parking guidance signs RTPI (bus stop displays) Rising Bollards (Cambridge City Centre) CCTV Cameras Flood Warning Signs	167 no 201 no 46 no(incl. 2 portable) 317 no 37 no 335 no 21 no 19 no 9 no
Grassed areas and trees	Highway Trees (All trees within falling distance are collectively termed 'highway trees') Verge length	87,429 no 4384km
Public rights of way	Restricted Byways Byways Bridleways Footpaths **Total**	5km 407km 595km 2,229km **3,237km**

Asset Group	Element	Quantity
Drainage	Gullies Offlets	154,150 no 7,101 no
Street Furniture	Non illuminated signs& bollards Safety Cameras Pedestrian guardrail Vehicle restraint systems (safety fencing) Weather stations Automatic Traffic Counters Verge Marker posts	62,744 no 35 no (plus one average speed camera installation) 10.78 km 54,291 km 3 no 63 no 6,867 no

2.3 Assets not covered by this plan

This Plan covers the management of key highway infrastructure assets. The Plan does not cover the following 'transport' related assets. Some are the responsibility of other authorities or agencies, whilst others are County Council assets that are currently managed outside of this Plan.

Fig 4: Assets not covered by this Plan

Asset	Responsibility
Guided Busway	CCC's Passenger Transport Service
Street Lighting	Covered by PFI contract with Balfour Beatty
Park and ride sites	CCC's Passenger Transport Service
Car Parks	Multi storey and street level managed by either private company or district council
Street name Plates (owned and managed by district councils)	District Council
Picnic site A10 Brandon Creek	CCCmaintains barrier and cuts vegetation
Bus shelters (Parish Council owned)	Parish Council except Drummer Street Bus Station Cambridge which is managed within Passenger Transport Service
Pay and Display parking machines	CCC'sTraffic Manager Team
Motorways and Trunk Roads M11 – A11 to A14 A11 – A14 to M11 A428 – A14 to A1 A14 – A11 to Boundary with Northamptonshire near Keyston A1(M) – A1 near Alconbury to Peterborough Boundary North of A15 Norman Cross A1 – A428 to A1(M) near Alconbury A47 – Norfolk Boundary near Emneth to Peterborough boundary near Thorney Toll	Highways England In Cambridgeshire there is 280km of trunk road and motorway network managed by Highways England

3. Data management

3.1 The main purpose of data collection is to provide the County Council with information to help make the best use of the funds available to the Authority.Data is collected via:

- Safety Inspections
- Condition Inspections / Surveys
- Inventory collection

Safety inspections are either walked, driven or cycled inspections. Driven Inspections are carried out by 2 people in a slow moving vehicle as outlined in table 4a below.

3.2 Asset data is required to enable the following:

- Effective Management of the Highway Network
- Assessment of the expected lives of individual assets or asset components
- The assessment of current and development of future levels of service
- The assessment of current and development of future performance indicators
- The development of sustainable maintenance options
- The identification of future investment strategies
- The development of short, medium and long-term forward works programmes
- Valuation assessments for each of the assets and the calculation of how they have depreciated in value since they were created

Once completed, these processes will allow informed and cost effective asset management decisions to be made.

3.3 Network Hierarchy

The Council's Highway Network Hierarchy is based upon the criteria set out in the 2005Code of Practice (CoP) Well Maintained Highways. The hierarchy reflects local needs and priorities. The hierarchies, which are shown in figures 4 a-c form the overarching framework for all data management activities. These were last reviewed in November 2013.

3.4 Safety Inspections

A primary source of information is a formal regime of safety inspections that identify and record category 1 defects.

3.5 The frequency and method of these inspections is outlined in Fig. 5 below. The safety inspection frequencies and methods set out in this Plan are based upon the 2005 Code of Practice, with some variations to reflect local circumstances.

3.6 Where there is a controlled pedestrian crossing point within a carriageway then the adjacent footway defect intervention criteria are applied. Pedestrianised areas are deemed to be footways for the purposes of safety inspections and defect intervention criteria.

3.7 A resilient network has been identified in accordance with the requirements of the 2016 Code of Practice"Well Managed Highway Infrastructure". Any carriageway on

the identified resilient network will receive a safety inspection at a minimum frequency equivalent to a 4a Link Road, i.e. 4 times per year.

Fig 5: Inspection frequencies for main asset groups

a) Carriageways					
Category	**Hierarchy Description**	**Type of Road General Description**	**Description**	**CCC Inspection frequency and type**	**CCC Inspection frequency tolerance**
1	Motorway	Limited access motorway regulations apply	Routes for fast moving long distance traffic.Fully grade separated and restrictions on use.	Not inspected by CCC – responsibility of HighwaysEngland	Not applicable
2	Strategic Route	Trunk Roads and some Principal 'A' roads between Primary destinations	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic.Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.	County Council Roads (non-trunk) are inspected 12 times per year (monthly) – Driven	± 7 calendar days
3a	Main Distributor	Major Urban Network and Inter-Primary Links. Short – medium distance traffic	Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access.In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety	12 times per year (monthly) – Driven	± 7 calendar days
3b	Secondary Distributor	Classified Road (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions*	In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network.In built up areas these roads have very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons.	12 times per year (monthly) – Driven	± 7 calendar days

4a	Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	In rural areas these roads link the smaller villages to the distributor roads.They are of varying width and not always capable of carrying two way traffic.In urban areas they are residential or industrial inter-connecting roads, with random pedestrian movements & uncontrolled parking	4 times a year (3 monthly) - Driven	± 14 calendar days
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to individual properties and land.They are often only single lane width and unsuitable for HGV's in urban areas they are often residential loop roads or cul-de-sacs	Annually (once per year) – Driven	± 28 calendar days
4c	Soft Roads (Green Lanes)	Unmade unclassified	Exclusively in rural areas carrying mainly agricultural vehicles and pedestrians	No formal inspection regime. Inspected on a reactive basis (standard is that they are passable in a 4 wheel drive vehicle)	Not applicable

*Whilst this is generally accepted, there are exceptions where some more minor classified roads are categorised as a 4a or 4b

b)Footways				
Category	**Category Name**	**Description**	**CCC Inspection frequency and type**	**CCC Inspection frequency tolerance**
1a	Prestige walking zones	Very busy areas of towns and cities with high public space and street scene contribution	12 times per year (monthly) – walked inspection with associated carriageway inspected at same time	± 7 calendar days
1	Primary Walking routes	Busy urban shopping and business areas and main pedestrian routes.	12 times per year (monthly) – walked inspection with associated carriageway inspected at same time	± 7 calendar days
2	Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.	12 times per year (monthly) – walked inspection with associated carriageway inspected at the same time	± 7 calendar days
3	Link Footways	Linking local access footways through urban areas and busy rural footways	Annually (once per year) - Driven with carriageway inspection	± 28 calendar days
4	Local Access Footways	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.	Annually (once per year) – Driven with carriageway inspection	± 28 calendar days

c) Cycleways			
Category	**Description**	**CCC Inspection frequency and type**	**CCC Inspection frequency tolerance**
A	Cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point (no entries allowing cycle access).	Inspected with carriageway at same frequency (see Fig. 5 a) above)	
B	Cycle track, a highway route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated.	Twice per year (6 monthly)	± 21 calendar days
C	Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the highway authority, but may be maintained by an authority under other powers or duties.	Annually (Once per year - cycled)	± 28 calendar days

3.8 Condition surveys

Condition surveys are used to provide information for the prioritisation of maintenance schemes and also for performance and benchmarking purposes. They provide key information used to determine the effectiveness of the Asset Management Strategy. Figure 6 below describes the extent of the condition surveys undertaken.

Fig 6: Condition Survey extent and coverage

Survey Type and description)	Extent	CCC coverage / frequency
Scanner	A Roads B Roads C Roads	100% of the network in one direction each year 100% of the network in one direction each year 50% of the network in one direction each year
CVI	Unclassified Roads	Up to 50% of the network each year
SCRIM	All hierarchy 2 & 3a roads	100% of the network in both directions each year
Deflectograph	All roads	Scheme specific as required during development of forward programmes
FNS	All footways	All A,B &C and U roads have been surveyed, approx. 20% of network on rolling programme

Highway Structures		
Category	**Description**	**CCC Inspection frequency and type**
GI	General Inspection of all structures and gantries	Every 2 years
PI	Principal Inspection	Every 6 Years of structures with Technical issues / difficulties

Traffic Signals (Incl. VAS)		
Category	**Description**	**CCC Inspection frequency and type**
Periodic Inspection (PI)	Physical condition of the site is checked visually, together with testing all of the electronic signal and communications equipment	Each installation is inspected once per year

Public Rights of Way		
Category	**Description**	**CCC Inspection frequency and type**
PROW	All PROW	No formal safety inspection. Inspected reactively

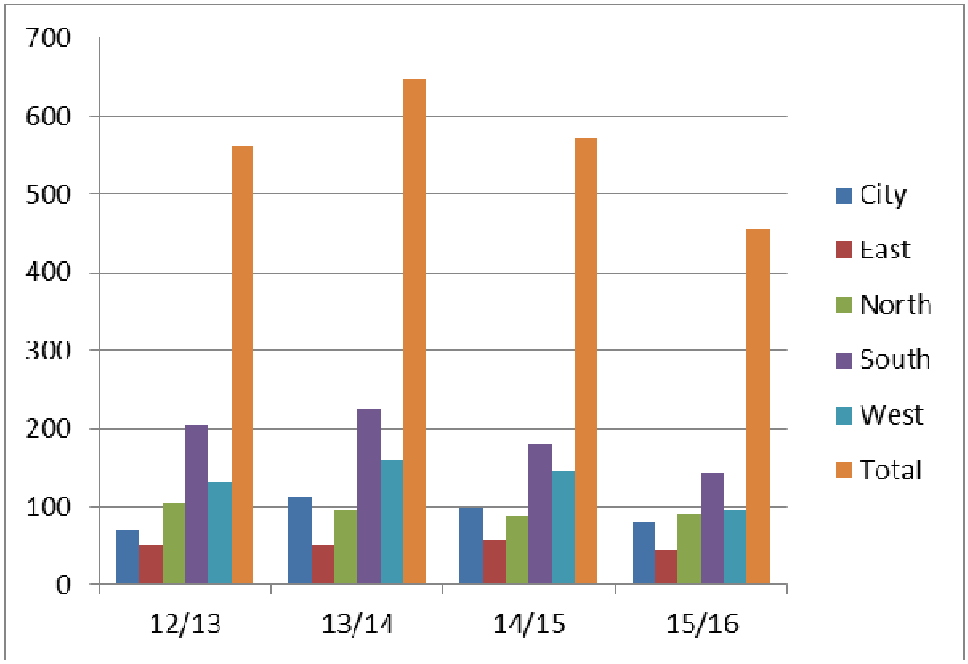
3.9 Inventory collection

The Council's Highway Management System (Symology's Insight) acts as the Councils Highway Asset Register within which all highway inventory data is stored.

3.10 Insurance Claims

The number of highway related insurance claims received can be indicative of both network condition and how well the network is being managed. The graph below shows the insurance data over the 4 years to 2015/16. Claims will continue to be monitored through the life of this plan.

Fig 7: Insurance Claims Received 2012 - 2016



	12/13	13/14	14/15	15/16
City	69	113	99	81
East	52	52	58	44
North	105	97	88	90
South	206	227	180	144
West	130	158	145	95
Total	562	647	570	454

3.11 Inspector Training

Highway Inspectors are trained to National Highway Inspector Competency Standards as set out in the 2005 Code of Practice Well Maintained Highways and are registered on the National Register of Highway Inspectors. In addition, all Inspectors will attend the Level 1 Tree Inspectors'Training Course (from April 2015). Refresher training for Inspectors is provided as per the CoP.

3.12 Highway Asset Management Training

Key staff within the Highways Service responsible for the overall management of the HIAMP have attended the Institute of Highway Engineers Highway Asset Management Practitioners Training course(or equivalent). Training for operational staff will be provided on an ongoing basis should new developments / practice be introduced.

4. Community requirements and customer communications

4.1 This section contains information about community requirements and how they have been identified. It also outlines how ongoing customer communications will take place in relation to highway maintenance activities.

4.2 Customer Priorities

The Council's Highway Asset Management Strategy was produced following analysis of data provided by customers so that community needs could be built into the strategy and in turn used to inform the development of this Plan.

4.3 The vast majority of customer contacts relate to the condition of carriageways. Fig 8 shows the proportions of the customer contacts received by the Council's Customer Service Centre associated with the differing highways assets over the last 5 years. Analysis of these carriageway service requests shows that over 50% of requests relate to the condition of unclassified roads (Figure 9). These figures support a need to focus future investment towards dealing with carriageways across all hierarchies.

Fig 8: Customer Service Requests by Asset Group 2011-2015

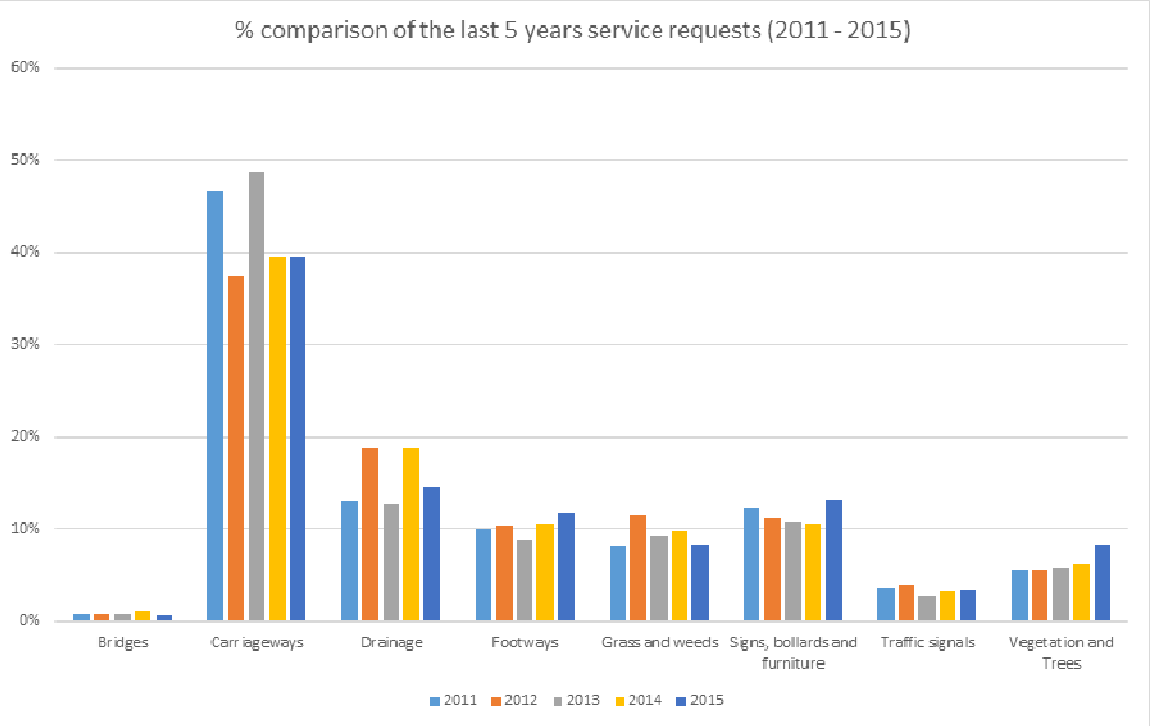
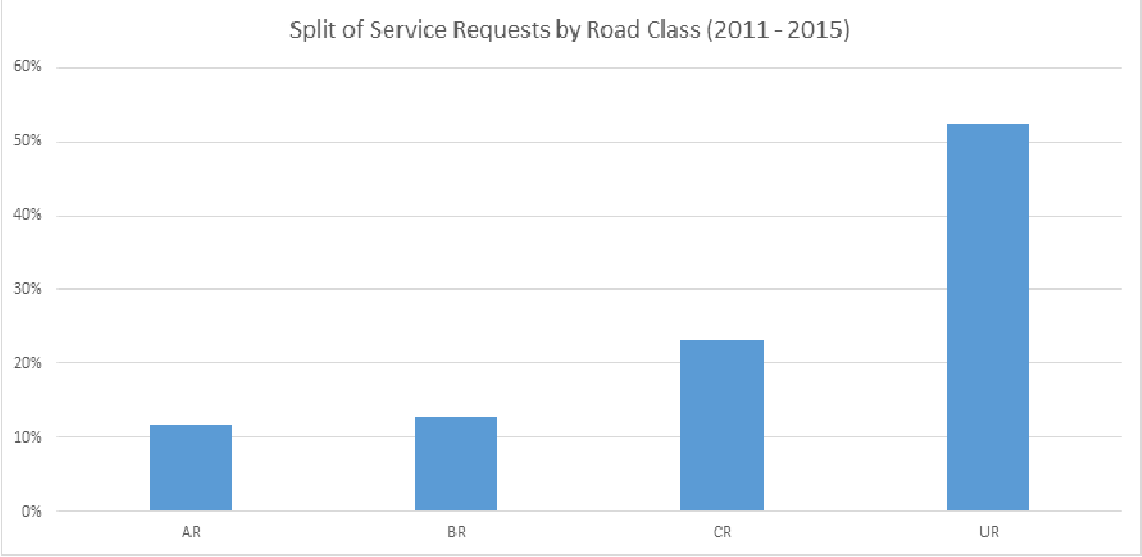


Fig 9: Split of service requests by road class 2011-2015



4.4 National Highways and Transportation Survey (NHT)

The Council currently participates in the NHT survey of customer priorities and satisfaction.

4.5 Recent results for the county, from the National Highways and Transportation (NHT) customer survey, show that the condition and safety of roadsare the criteria that are "most important to users" and the criterion with which users are least satisfied is the condition of roads. The data shows that of all the aspects of the highways service, the area in which customers would least like to see a reduction in the level of service is the maintenance of roads.

4.6 It is recognised that other highway subject areas mentioned generated significant levels of interest (in particular pavements, safety on roads). However, this customer derived data supportsthe need for increased investment in roads (carriageways). It also indicates a clear public preference for investment in carriageways ahead of other highway assets.

4.7 Communications

The aspirations of customers are likely to focus on visible and perceived safety related condition, whereas engineering needs will be based on detailed, often complex condition surveys, coupled with knowledge and experience of how assets behave over time.

4.8 It is therefore essential that the County Council presents any complex engineering based information in a manner that is easily understood by communities. To help with this, a Communication Strategy for Highway Services has been developed and this can be found in Appendix II.

4.9 Contact from members of the public will be handled in line with Cambridgeshire County Council's corporate standards. The involvement of local members, Spokespersons and relevant Committee(s) will be in line with the Council's guide for member involvement. In addition to these standards, County Councillors, District / City Councils and Parish / Town Councils will be appropriately informed of work taking place in their area.

4.10 Our communication activities will focus around:

- Communicating through a variety of channels, appropriate to our target audience
- Being clear about the level of influence stakeholders have
- Being open and making information available
- Using consistent messages
- Managing expectations
- Being digital by design and making use of corporate social media resources
- Make information available in other formats and languages if required

4.11 In addition, all communications will:

- use Plain English
- be tailored to their target audience

- direct to further resources when appropriate
- be proactive about keeping the public informed about how 'their' money is being spent

5. Future Demand

5.1 The future usage and demands on the network need to be assessed to facilitate the furtherdevelopment of this plan and formulation of proposals for future funding.

The main demands that could become influential are:

- Asset growth
- Traffic growth
- Population growth
- Legislation Changes
- Changes in Technology
- Climate Change – Environmentalconditions

5.2 Asset growth

New development and growth within Cambridgeshire has and will continue to create additional highway assets that will require future maintenance.

5.3 Traffic growth

Traffic Growth in the county is monitored regularly and is detailed in the Annual Traffic Monitoring Report. The 2015 Report key headlines are:

- The density of HGV traffic on Cambridgeshire's trunk 'A' roads is almost three and a half times the national average, and on non-trunk main roads it is80% above the national average
- On the county's principal road network, the greatest growth in traffic over the past ten years has occurred on the A10 (26%)

5.4 East of England Forecast Traffic growth

For the East of England, forecast growth in all motor vehicle traffic between 2010 and 2015 is 7%, with a forecast growth of 16.1% in HGV traffic over the same 5 yearperiod.

5.5 Traffic Composition

The composition of traffic is a major factor that influences the rate at which the highway network deteriorates. In Cambridgeshire, this is a particular concern in areas where agricultural activities are prevalent on roads that have 'evolved' and have never been designed to deal which such heavy loads. This accelerated deterioration is of significant concern in the north of the county.

5.6 Population Growth

Population in the county is forecast to increase by 25% over the next 20 years. In order to satisfy this, there will be a need to ensure that the road network and other highway infrastructure will satisfy the increased potential demand.

5.7 Environmental Conditions

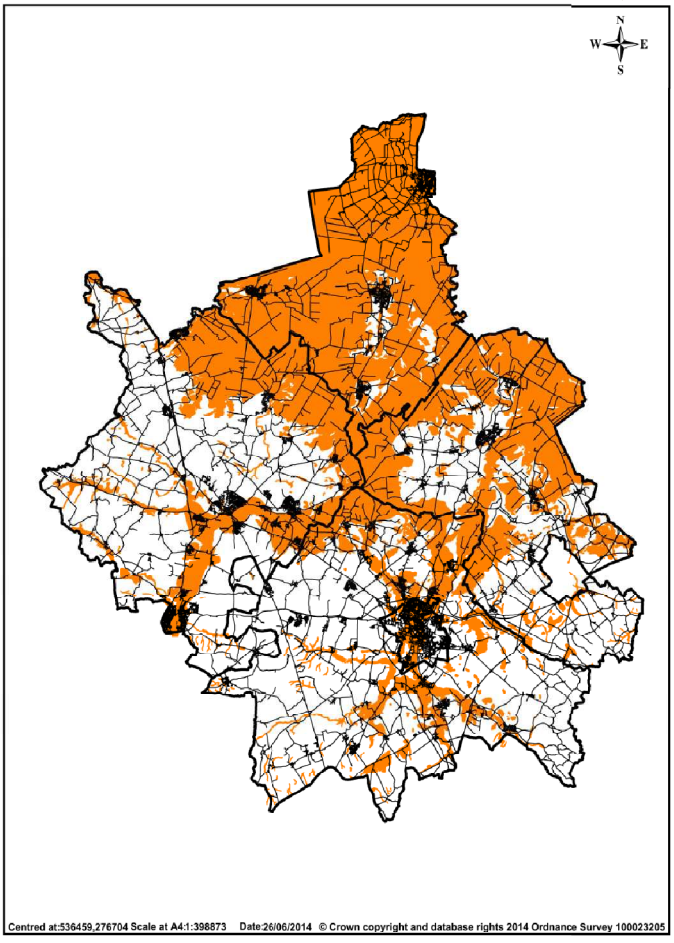
One of the most significant issues that impacts on the condition of Cambridgeshire's carriageway assets is that of 'drought damage'.

Fenland areas have soils which are "susceptible to cyclic shrinkage and swelling". This is exacerbated in periods of unusually high or low rainfall and this movement can aggravate cracking and subsidence along roads in affected areas. This became particularly prevalent during the summer of 2011 which was exceptionally dry and caused widespread damage to the road infrastructure around the north of the county.

5.8 The map below shows the areas of the county (in orange) that are at higher risk of 'drought damage'. The strategies for carriageways, along with the associated lifecycle plans, recognise the need to deal with these roads appropriately.

Fig 12: Drought damage (Fen soil) statistics

Class of Road	Total Network Length	Susceptible Roads by class (km)	Susceptible Roads by class (%)	% of total road class affected
A	453	112	9	25
B	554	191	15	34
C	1141	316	25	28
U	2257	631	51	28
Total	**4405**	**1250**	**100**	**28**



5.9 Severeweather events

Severe weather events will cause increased damage to the highway network. This is likely to be more significant on carriageway assets, through flooding and the impact of ice/snow on the fabric of the road. It is recognised that the funding breakdowns laid out in this plan would need to be reviewed should such an event occur. Flooding events will be managed in conjunction with the Council's Floods and Water Team who manage the Council's obligations as the Lead Local Flood Authority under the Floods and Water Management Act 2010.

6. Asset Investment Strategies

6.1 Prudential Borrowing Strategy

The need to invest in highway maintenance was recognised by the County Council in 2010/11 when a commitment to use prudential borrowing to invest an additional £90m in highway maintenance was made.This strategy assumes that the remainder of this funding will be available. This has been approved by members. The strategy optimises the use of this funding by investing in the right assets at the right time.

6.2 The strategy assumes the funding below:

- Annual LTP Capital Funding for Highways £14.591m*
- Prudential Borrowing (remaining at end of 2015/16) est. £37.519m

*Allocation shown assuming maximum funding is achieved via the DfT Incentive Fund

and

- Directs all the remaining prudential borrowing monies to carriageways
- Spreads the investment of prudential borrowing until 2022/23.This provides significant advantages in terms borrowing costs, greater value in the selection of schemes and delivers a consistent programme level each year

6.3 Maintenance Strategy

The maintenance strategy is the plan of action required to accomplish the specific performance targets for each asset group. The maintenance strategy targets intervention thresholds at or below where maintenance action is to be considered.

6.4 A preventative maintenance strategy is adopted for carriageways and footways, investing a greater proportion of the available budget to treat assets in the early stages of deterioration.This is opposed to a 'worst first' approach which targets investment towards those assets that are at the end of their life and are in a poorer condition.

6.5 The preventative approach being adopted means that, in some cases, roads which appear to be in poor condition might wait longer for repair, while roads which appear in better condition are treated to arrest their deterioration. This HIAMP clearly sets out new and affordable Service Standards in line with this approach.

6.6 There will also be changes to seasonal maintenance and the way we respond to issues reported by the public.For example, grass mightbe cut less often, white lines mightbe replaced less frequentlyand potholes in some locationsmightbe allowed to further deteriorate before they are repaired.

6.7 The asset management approach has increased the quantity of surface treatments carried out each year (e.g. surface dressing), and decreased the amount spent on traditional resurfacing, whereby the old surface is completely removed and replaced.

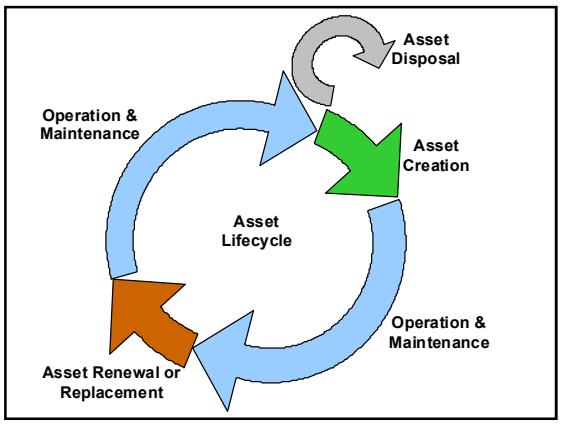
6.8 Structures and Traffic Signal Assets will be maintained on the basis of need, within the budgets available. In effect, the assets in the worst condition will be dealt with first.

6.9 Lifecycle Planning

The whole life costing approach considers all of the costs associated with the maintenance of an asset until it needs to be fully replaced.Highway assets have lifecycles that include the following phases:

- Creation/Acquisition
- Operation and Maintenance
- Renewal, Replacement or upgrade
- Operation and Maintenance
- Disposalor Decommissioning

Fig 13: Asset Lifecycle



Consideration of each of these phases for the Council's highway assets will help drive a shift towards longer-term asset management and planning.Such a longer-term approach is a key element of the highway asset management approach.

6.10 Lifecycle Approach through Long Term Cost Prediction (LTCP) Models

When developing the Council's Asset Management Strategy, lifecycle planning has been used to consider different treatment options, their performance and their impact upon the whole life cost of maintaining the assets.For each key asset group the Lifecycle Plan is linked directly to the Service Standards.

6.11 Lifecycle Plan Outputs

For each of the key asset groups,Life Cycle Planning models have been created and the effects of differing investment scenarios investigated.

6.12 Carriageways

The LTCP model for carriageway maintenance allocates investment into 3 broad treatment categories:Strengthening Treatment, Resurfacing Treatment&Surface

Treatment. Carriageway funding will be allocated to treatments as determined by the LTCP model with specific sites identified primarily through the Council's Pavement Management System. Schemes will be put forward though the Transport Delivery Plan.

6.13 The profile graphs below show carriageway condition predictions up to 2034 based on the funding assumptions made in Section 7. Banding for RCI values are given in Appendix III.

Fig 14: Condition ouput from LTCP Models for All Roads

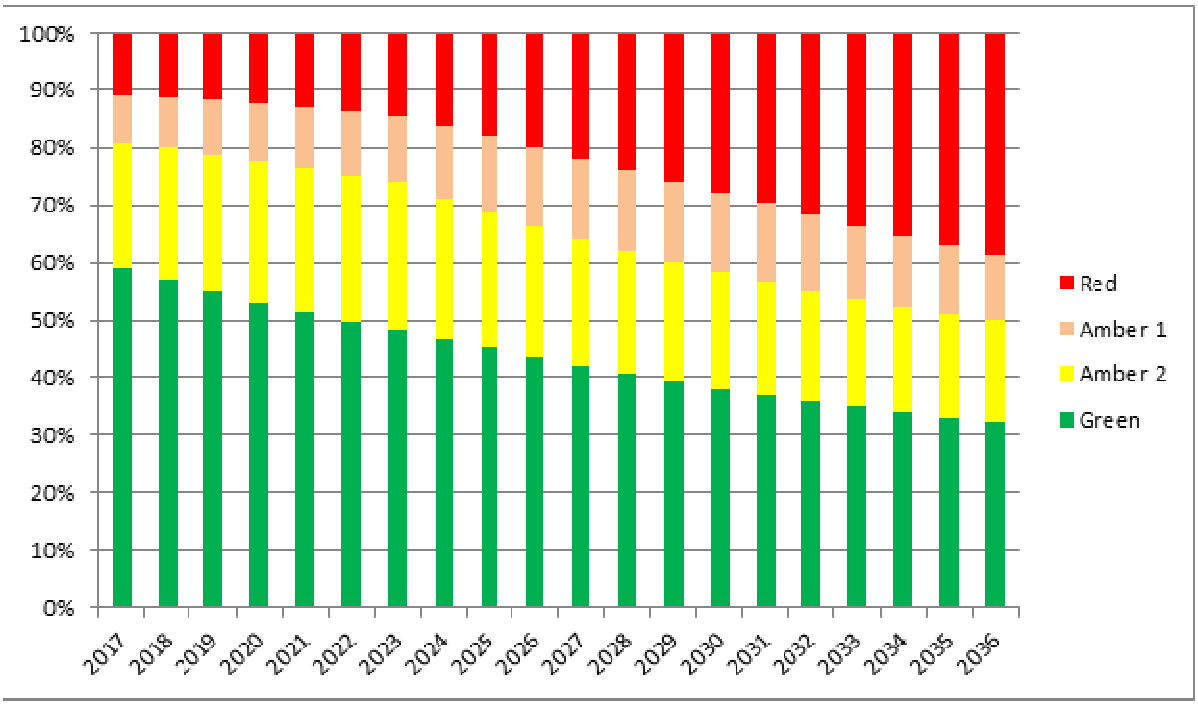
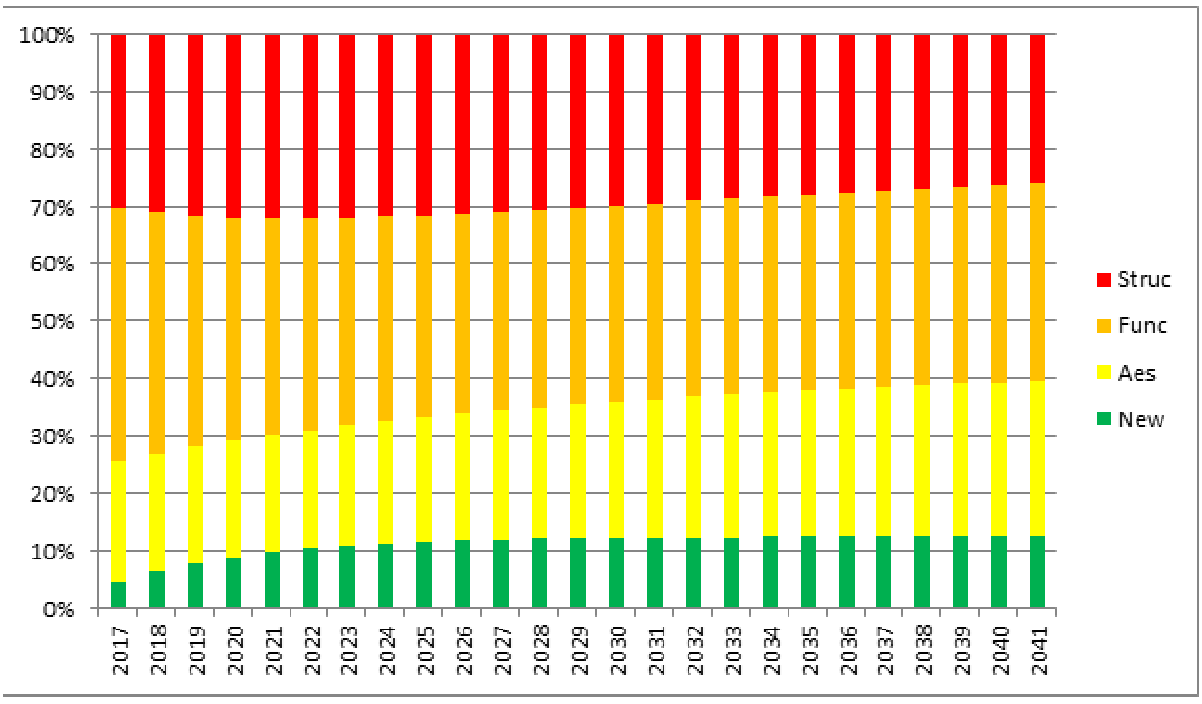


Fig 15: Condition ouput from LTCP Models for Footways - Cat 1a and 1



7. Financial Summary

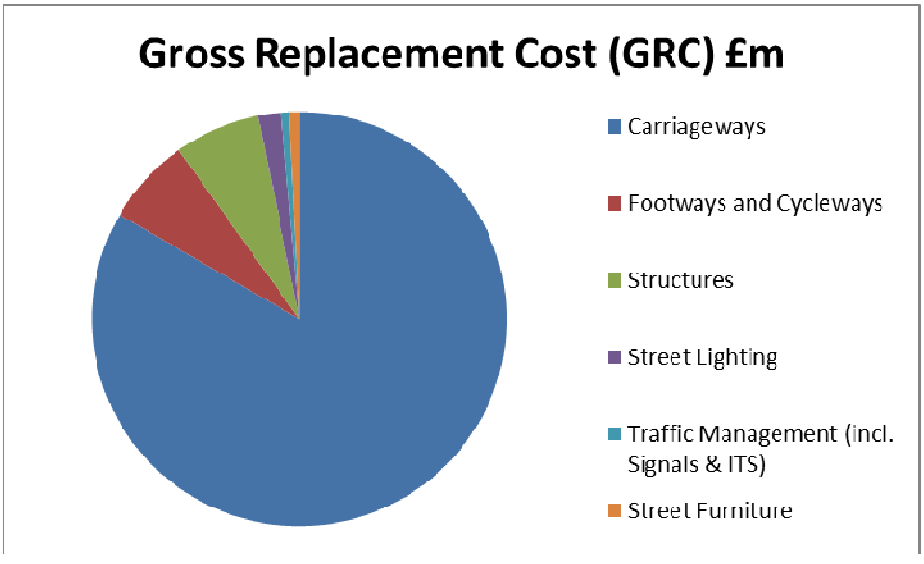
7.1 Funding for highway asset maintenance and improvementis split into revenue and capital expenditure.Consideration oflevels of service, the views ofstakeholders, risk management and whole life costs will serve to support ongoing investment decisions.

7.2 Valuation

As at July 2016 Cambridgeshire County Council's Highway Assets are valued as follows. All financial figures within the HIAMP are based on current values and are not discounted or adjusted for inflation.

Fig 16: Asset Valuation Figures

Asset	Gross Replacement Cost (GRC) £m	Depreciated Replacement Cost (DRC) £m	Annualised Depreciation Cost (ADC) £m
Carriageways	5,398	5,054	36
Footways and Cycleways	438	150	8
Structures	433	282	7
Street Lighting	115	88	2
Traffic Management (incl. Signals & ITS)	38	15	2
Street Furniture	51	11	2
Total	**£6,473**	**£5,600**	**£57**



7.3 Planned funding and investment

The Service Standards Shown in Section 9 assume the future investment in maintenance forecastbelow in Figure 17. These allocations have been optimised to meet the requirements of the Highway Asset Management Strategy.

Fig 17: Investment forecast

		Actual Budget	Forecast Budget			
Asset Group	**Budget / works**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Carriageways	Revenue (routine & reactive)	1,101	To be confirmed			
	Capital - LTP (planned)	6,112	6,272	6,322	6,472	6,472
	Capital - Prudential Borrowing	6,000	6,269	6,250	6,250	6,250
	Capital - Pothole Action Fund	973	To be confirmed			
Footways& Cycleways	Revenue (routine & reactive)	470	To be confirmed			
	Capital (planned)	1,400	1,200	1,200	1,200	1,200
Locally Determined schemes	Capital - LTP (planned)	650	650	600	600	600
Traffic Signals& VMS	Energy Costs	220	To be confirmed			
	Revenue (routine & reactive)	377	To be confirmed			
	Capital - LTP (planned)	850	850	850	850	850
Structures	Revenue (routine & reactive)	154	To be confirmed			
	Capital - LTP (planned)	2,564	2,564	2,564	2,564	2,564
Drainage	Revenue (routine & reactive)	456	To be confirmed			
	Capital - LTP (planned)	955	1,000	1,000	1,000	1,000
Safety Fencing	Revenue (routine & reactive)	0	To be confirmed			
	Capital - LTP (planned)	250	250	250	100	100
Street Furniture, Signs and road markings	Revenue (routine & reactive)	754	To be confirmed			
Cyclic (Grass Cutting, Weed Spraying, Gully Emptying)	Revenue	1,670	To be confirmed			
Winter Maintenance	Revenue	1,448	To be confirmed			
Public Rights of Way	Revenue (routine & reactive)	35	To be confirmed			
	Capital - LTP (planned)	140	140	140	140	140

Asset Group	Budget / works	Actual Budget 2016/17	Forecast Budget 2017/18	2018/19	2019/20	2020/21
Integrated Highway Management Centre	Energy costs	13	To be confirmed			
	Revenue (routine & reactive)	70	To be confirmed			
	Capital - LTP (planned)	195	200	200	200	200
Real Time Passenger Information	Energy costs	13	To be confirmed			
	Revenue (routine & reactive)	225	To be confirmed			
	Capital - LTP (planned)	155	165	165	165	165
Other Staff Costs, Highway condition Surveys, Fees, Inspections etc.	Revenue (routine & reactive)	3,040	To be confirmed			
	Capital	288	260	260	260	260
Total Revenue		**10,026**	**To be confirmed**			
Total Capital - Prudential Borrowing		**6,000**	**6,269**	**6,250**	**6,250**	**6,250**
Total Capital - LTP		**14,599**	**14,591**	**14,591**	**14,591**	**14,591**
Total Capital – Pothole Action Fund		**973**	**1,155**	**To be confirmed**		

Highway Maintenance Block Capital Funding formula annual allocations from 2016 (over and above the needs based formula) will be determined by self-assessment, related to performance around efficiencies and Asset management practices. These capital figures assume band 3 (maximum funding).

8. Asset Management Planning Practice

8.1 This Section outlines the key activities that are in place to help deliver the elements of this plan and in turn the overall strategy.

8.2 Forward Works Programme – The Transport Delivery Plan (TDP)

The County Council's forward works programme is the Transport Delivery Plan. It is a 3 year programme that contains all capital maintenance and improvement schemes, thereby acting as an Implementation Plan for the LTP. Maintenance schemes will be selected based on their condition in order to help deliver the outcomes of the Asset Management Strategy. The processes that govern how maintenance schemes are selected for the TDP are shown in Appendix IV. The TDP is approved annually by Members and is subject to confirmation of need and the available resources.

8.3 Local Discretionary Highways Funding

In order to help provide a more efficient and responsive local highway maintenance service, the TDP will allocate a nominal proportion of the Capital Maintenance budget that is to be managed within each geographical highways area. This funding is specifically for highway maintenance work and will be used for small scale works and importantly on sites that support the delivery of the Highway Asset Management strategic outcomes. The level of funding provided to this fund will be reviewed annually with expenditure monitored to ensure value for money.

8.4 Local Highways Initiatives

The Local Highways Improvement initiative allows local communities to apply for up to £10,000 as a contribution to a capital highways project. Projects should improve road safety and be based on issues that are felt to be important locally. To be eligible applicants must supply at least 10% of the overall cost. These projects need the support of local Parish/Town Councils and where appropriate they will need to meet (not contravene) the principles of the Asset Management Strategy and supporting policies.

8.5 Annual review of Options andAsset Investment Strategies

An important part of ongoing Asset Management is the monitoring of the performance of the strategy as outlined in Section 9.3.

8.6 Highway Services

Performance of the Highway Services will be regularly monitored and reported upon in order to ensure that the contract is delivering Value for Money and is supporting the objectives of the County Council's Highway Asset Management approach.

8.7 The commissioning of future Highway Services in Cambridgeshire is being built around the principles of Asset Management and achieving the best long term outcomes for the highway network and for the people of Cambridgeshire.

9. Service Standards

9.1 This section sets out the primary Service Standards and performance targets that can be expected from Cambridgeshire's highway assets.

9.2 The Service Standards:

- Are closely linked with asset condition (both existing and desired) and demand aspirations from both the Council and Customer (what it is expected to deliver nowand throughout its life cycle)
- Relate to such factors as: quality, quantity, reliability, responsiveness, environmental effect, cost and performance

9.3 Use of Service Standards

This plan is based on the delivery of affordable Service Standards (based on the funding levels shown in Section 7). The Service Standards will be used:

- To inform customers of the proposed type and level of service to be offered
- As a focus for the asset management strategy outcomes developed to deliver the required level of service
- As a measure of the effectiveness of this asset management plan
- To help identify the value and benefits of the services offered
- To enable customers to assess suitability and affordability of the services offered
- To inform members of the levels of service available

9.4 The prescribed Service Standards are shown inthe tables below – Headline Service Standard Statements are shown at the top of each table.

Fig 18: Service Standards Statements, measures and targets

a) We will inspect carriageways, footways & cycleways for defects with the busiest routes inspected most frequently			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Safety Inspections	Percentage of Safety inspections completed on time within stated tolerance	100%	

b) We will respond to make safe emergency incidents			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Emergency Incidents	Percentage of emergency incidents attended within response times*	90%	

c) We will repair known defects that meet our repair criteria				
Service	**Measured by**		**Target Standard**	**2016-17 Actual**
Road defects	% of high priority (Cat 1) defects repaired within response times*	Strategic & Main Distributor	90%	
		Secondary Distributor	90%	
		All other roads	90%	
	% of other defects (Cat 2) repaired within response times*	Strategic & Main Distributor	90%	
		Secondary Distributor	90%	
		All other roads	90%	
Road condition (see Appendix III for RCI bandings)	Percentage of the road network where maintenance should be considered	A Roads	5%	
		B Roads	7.5%	
		C Roads	10%	
		Unclassified Roads	30%	
Skid resistance	Percentage of the skid resistance network at or below the skidding investigatory level (3 year average value)		25%	
Footway / cycleway defects	% of high priority (Cat 1) defects made safe within response times*	Primary walking / cycling routes	90%	
		Others	90%	
	% of other defects (Cat 2) repaired within response times*	Primary walking / cycling routes	90%	
		Others	90%	

d) We will maintain safe structures and bridges			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Structures (see Appendix III for BSCI bandings)	% of structures in very/severe poor condition	20%	
	Number of structures requiring strengthening	40	

e) We will maintain a reliable traffic signals network			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Traffic signal faults	% of compliance with fault repair response times for urgent defects**	95%	
	% of compliance with fault repair response times for non-urgent defects**	95%	
Traffic signal condition	% of traffic signal installations exceeding average expected service life (20 years)	9%	

f) We will ensure that the identified gritting routes are treated during periods of snow and ice			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Winter Maintenance	Percentage of precautionary road salting completed on time within identified season*	100%	

g) We will cut the grass on highway verges to maintain visibility			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Cut the grass on highway verges	Number of cuts of grass verges per annum – Rural Number of cuts of grass verges per annum – Urban	2 3	

h) We will empty roadside gullies cyclically			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Empty roadside gullies	Targeted approachat agreed locations identified on risk based approach	N/A	

i) We will apply weed killer to highway areas			
Service	**Measured by**	**Target Standard**	**2016-17 Actual**
Apply Weed killer	Within urban kerbed areas only (excluding central islands) per annum	2	

* Time standards may be exceeded by a reasonable period due to unforeseen delays such as adverse weather conditions, emergency road closures, excessive traffic congestion or plant breakdown
** As defined in the council's Intelligent Transport Systems Term Services Contract

9.5 Reactive Maintenance Interventions

Achievement of the Council's Asset Management Strategy objectives is reliant on the efficient application of affordable reactive maintenance standards.The interventions have been developed taking into account the need to carry out routine maintenance work in a planned and efficient way, balanced with the need to maintain high levels of highway user safety.These interventions support the right first time principles outlined in the HMEP document - Prevention and a Better Cure.

9.6 Response times

The 2005 Code of Practice defines defects in two categories:

- Category 1 - those that require prompt attention because they represent animmediate or imminent hazard or because there is a risk of short-term structural deterioration
- Category 2 - all other defects

9.7 The Council's response time categories and timescales are show below:

Fig 19: Response Timescales

Type of defect/incident	Timescale	Response
Emergency incidents	up to 2 hours	Attend / make safe
Category 1 excluding potholes (urgent)	up to 36 hours	Make safe or repair
Category 1 potholes (urgent)	up to 5 calendar days	Permanent repair
Category 2 defects (planned)	up to 12 weeks	Repair during next available programme

9.8 Where defects with potentially serious consequences for network safetyare made safe by means of temporary signing or repair, arrangements willbe made for further inspections to ensure the continued integrityof the signing or repair is maintained, until permanent repairs are undertaken.

9.9 The reactive maintenance defect intervention levels shown in Appendix I have been developed using a risk based approach in line with the above response times.

10. Performance Management and Benchmarking

10.1 This plan outlines a series of baseline statistics for the Council's various assets and activities. This is key information in helping ascertain a baseline position from which future performance can be gauged to help define Value for Money (VfM) going forward.

10.2 Monthly Performance Reports

Performance reports will be produced on a monthly basis for use by operational teams focussing on local budgetary, customer service and works ordering information; that will help with ongoing performance management.

10.3 Benchmarking

The County Council recognises the importance of sharing information to support continuous improvement. Benchmarking allows comparisons to be made with other similar authorities, the sharing ofbest practice and performance information and provides a basis to develop local and national best practice.

10.4 The Council's involvement in benchmarking activities is under continuous review to ensure that they continue to provide the required benefits and value for money.

- NHT Customer Satisfaction survey and Customer Quality Cost comparisons (CQC)
- DfT - Road condition comparisons against Shire authorities
- Data and process benchmarking via the Eastern Highways Alliance (EHA)

11. Risk Management

11.1 Managing risk is an integral part of the management of the highways assets. This section of the plan only outlines the main risks to the delivery of the Highway Asset Management Strategy.

11.2 The County Council's Risk Management Policy and procedures set out how theAuthority manages risk corporately and this approach has been applied to the way in which highway assets are managed.

11.3 The delivery of the Highway Asset Management Strategy is an overarching risk that is identified within the Infrastructure Management and Operations (IMO) Directorate's Risk Register.There is also a joint register currently managed and reviewed by our highway services provider through the Cambridgeshire Highways Risk Register. Theseregisters are reviewed quarterly. These registers in turn feed any relevant risks into the Corporate Risk Register.

11.4 The high level tactical risks that relate to the delivery of effective highway asset management, the achievement of the highway asset management strategic outcomes and the associated service standards are identified in Fig 20 below.

Fig 20: Table of Risks

Ref	Plan assumption	Risk	Action if Risk occurs
1.*	The plan is based on operating with reliable IT hardware, Highway Management and Pavement Management Systems	Failure of systems will impact on ability to identify correct interventions; will prevent works ordering and the effective management of customer service requests.	Adoption of actions as outlined in CCC and Service Provider(s) Business Continuity Plan
2.	The plan assumes that the re commissioning of Highway Services post 2017will have negligible impact on the delivery of the Asset Management Strategy outcomes	Failure to effectively commission new highway services contract in 2017 or inadequate mobilisation impacts on programme delivery.	Predictions & models will be revised and this plan updated accordingly, should significant impact occur.

Ref	Plan assumption	Risk	Action if Risk occurs
3.	The Plan is based upon a non-exceptional winter.	Adverse winter weather will lead to higher levels of defects requiring reactive repair than have been anticipated.	Predictions and budget disaggregation within this plan will be revised and updated in the event of abnormal winters.
4.	The Plan is based upon the assumption that no significant 'drought' events occur that impact the network	Drought events lead to higher levels of deterioration in parts of the network founded on 'fen soils' that are susceptible to cyclic shrinkage and swelling	Predictions and budget disaggregation within this plan will be revised and updated in the event of prolonged drought events.
5.	The Plan is based on the assumption that no significant flood damage occurs on the network	Flooding will lead to higher levels of defects requiring reactive repair than have been planned for. Significant events could lead to the failure of key assets.	Predictions and budget disaggregation within this plan will be revised and updated in the event of significant flood damage.
6.	The Plan assumes available budgets as shown in section 7	Funding available for theHighways Services might reduce.	Service Standards will be revised to affordable levels.
7.*	The Plan assumes that construction inflation will remain at a similar level to the last 5 years.	Construction inflation will increase the cost of works and an adverse rise will impact on the quantity of work that needs to be delivered to meet the required service standards.	- Service Standards will be reviewed and revised to affordable levels. - Review of supply chain management, procurement arrangements and more sustainable practicesby the Service Provider
8.	The Plan assumes that any increase in assets will be matched by sufficient additional maintenance funding being provided	Increase of new development through the growth agenda. A14 improvement scheme will result in increased assets to maintain.	- Commuted sums obtained where appropriate. - Budgets and predictions will be revised and this plan updated accordingly.
9.	Deterioration rates and levels of defects are based on current data which for some assets (e.g. footways) is limited	Assets deteriorate more rapidly than has been predicted resulting in insufficient levels of investment.	Levels of planned and reactive maintenance to be revised accordingly.

11.5 The risks identified with an * are identified within the Cambridgeshire Highways Risk register. This register also contains a series of wider contractual / operational risks that relate to the provision of highway maintenance services by the current service provider.

11.6 Critical infrastructure is that which would have a significant impact upon the integrity of the county's highway network in the event of failure or unavailability. Cambridgeshire's critical highway infrastructure has been identified and risk registers are in place for each critical asset. These risk registers include appropriate mitigation measures.

11.7 The Council's approach to highway asset management is focussed on implementing (and funding) a preventative approach to carriageway maintenance. In order to deliver this a 'comparative risk' approach has been applied to other key assets, such as footways, traffic signals and structures. This approach supports the process of scheme appraisal and selection by assisting with the assessment of:

- The comparative risks of providing differing levels of service, e.g. is it acceptable to fund only a minimum level of service for a certain asset group i.e. a repair when broken (reactive) approach?
- The comparative risk of funding works on different assets, e.g. is it better to fund works on carriageways as opposed to structures?
- The comparative risk of funding improvements to the network as opposed to maintenance works, e.g. is it better to provide additional speed control facilities or to increase response time to certain defects?

11.8 The identification of highway defects will be managed on the basis of risk to ensure the best use of funding. This approach takes into account the type and nature of a particular defect along with its location on the network.

11.9 The intervention levels support the preventative approach that is promoted within the Highway Asset Management Strategy, which relies on the principles of 'right first time' being applied in a planned and effective way.

11.10 The reactive maintenance intervention levels are shown in Appendix I.

12. Continuous Improvement

12.1 The County Council's approach to Highway Asset Management and the development of its Policy, Strategy and this Plan reflect the recommendations outlined within the HMEP Highway Infrastructure Asset Management Guidance document.

12.2 This Plan has been produced to be a catalyst for driving improvements and efficiencies in the way highway maintenance activities are carried out in Cambridgeshire. Whilst specific benefits are being targeted there are ongoing improvement actions that are required to help realise and optimise these benefits.

12.3 Key areas for improvement and development include:

- Refinement of data and systems to enhance life cycle planning for key assets
- Implementation of the new Code of Practice: "Well-Managed Highways Infrastructure"
- Working with the new highways services provider to maximise opportunities to jointly develop the asset management approach

13. Management of the Plan

13.1 Responsibilities

The table below shows the key officers who have ultimate responsibility for the delivery of the HIAMP.

Fig 21: Responsibilities for Highway Asset Management Activities

Plan element	Main Council Position(s) Responsible
HIAMP Document	- Highways Asset Manager
HIAMP implementation and improvements	- Highways Asset Manager - Asset Planning Manager
HIAMP document updating and reporting	- Asset Planning Manager
Finance and Valuation	- Highways Asset Manager - Asset Planning Manager
HIAMP Data	- Asset Planning Manager
HIAMP Risk	- Head of Highways - Highways Asset Manager
Delivery of Lifecycle Plan outputs (Carriageway, Footway, Traffic Signals, Structures)	- Head of Highways - Signals and Systems Manager - MaintenanceManager - Highways Projects and Road Safety Manager - TrafficManager
Monthly Performance Reports	- Asset Systems Manager
Annual Options and Performance Report	- Highways Asset Manager - Asset Planning Manager
Communication Strategy	- Head of Highways - Highways Asset Manager
Highway Asset Management Policy and Strategy	- Head of Highways - Highways Asset Manager

14. Links to associated documents and references

The following documents are key components of the County Council's approach to Highway Asset Management and have direct links to this Plan

a) **Cambridgeshire County Council's Highway Asset Management Policy.** The Highway Asset Management Policy describes the principles adopted in applying asset management and how they link to the Council's Corporate and LTP Objectives

b) **Cambridgeshire County Council's Highway Asset Management Strategy.**Sets out the strategy of how highway infrastructure asset management is to be delivered

c) **Cambridgeshire County Council's Transport Delivery Plan.**The County Council's Forward Programme of Capital Maintenance and Improvement Schemes (3 Year)

d) **Cambridgeshire County Council's 3rd Local Transport Plan.**The Council's high level plan that contains details of the improvement and maintenance priorities for transport within Cambridgeshire

e) **Cambridgeshire County Council's Winter Maintenance Plan.**The Winter Maintenance Plan documents how the Winter Service will be delivered and shows which parts of the network will be treated

f) **Cambridgeshire Highways Business Plan and Risk Register.**Used to manage and monitor the performance of the Highway Services Contract.The business plan lays out a programme of further developments and improvements to highway service delivery

g) **Cambridgeshire County Council's Rights of Way Improvement Plan.** A document covering the whole of Cambridgeshire, setting out how the authority intends to improve the management, provision and promotion of public rights of way in the county

h) **Well Maintained Highways.2005** National Code of Practice for Highway Maintenance and management

i) **Cambridgeshire's Local Flood Risk Management Strategy.**Produced by the County Council as the Lead Local Flood Authority for Cambridgeshire (LLFA). Focuses on local flood risk from surface water (incl. highway surface water), groundwater and ordinary watercourses, and identifies the responsibilities for flooding within the county and enables a range of organisations to work together to improve the management of flood risk

j) **Cambridgeshire County Council's Traffic Monitoring Report 2015.** Annual report that publishes the results of the TrafficCensus and associatedinformation

15. Glossary

Terminology	Definition
AC	Accumulated Consumption
ADEPT	Association of Directors of Environment, Economy, Planning and Transport (formerly County Surveyors Society -CSS)
Asset Management	A strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers

Terminology	Definition
Asset Management Regime	Comprises the organisational structure and business processes, asset management planning and work planning and information management and systems that enable asset management to be effectively planned and delivered
Asset Management System	The hardware and software that supports Asset Management practices and processes. Used to store the asset data and information
Asset Valuation	The procedure used to calculate the asset value
Authority	A collective term used to refer to the asset owner
Backlog	The monetary value of work required to close the gap between the current performance provided by an asset and the required performance. Where the required performance is defined nationally and may be lower than some locally set performance targets
BCI	Bridge Condition Indices – Indicator used to assess the condition of Highway structures
BVPI	Best Value Performance Indicator
Cambridgeshire Highways	The partnership between Cambridgeshire County Council and Skanska delivering Highway Services on behalf of the County Council
Council or County Council or CCC	Cambridgeshire County Council
CHART	Computerised Highway Assessment of Ratings and Treatment
CIPFA	Chartered Institute of Public Finance and Accountancy
CNS	Coarse Network Surveys
Control	An action to minimise the negative risk
CROW	Countryside and Rights of Way Act 2000
CVI	Coarse Visual Inspection
Data	Numbers, words, symbols, pictures, etc. without context or meaning, i.e. data in a raw format.
DCD	Data Capture Devices
Deflectograph	Machine survey that measures the deflection of a pavement, determining its structural condition
DfT	Department for Transport
DRC	Depreciated Replacement Cost
DVI	Detailed Visual Inspection
EHA	Eastern Highways Alliance
FNS	Footway Network Survey

Terminology	Definition
Symology	Supplier of Cambridgeshire County Council's Computer Based Highway Management System
GAAP	Generally Accepted Accounting Practice
GIS	Geographical Information System
GPS	Global Positioning System
GRC	Gross Replacement Cost
HAMS	Highway Asset Management Strategy
HIAMP	Highway Infrastructure Asset Management Plan - A plan for managing the transport asset base over a period of time in order to deliver agreed target Levels of Service, in the most cost effective manner.
Highway Network	Collective term for publicly maintained facilities laid out for all types of user, and for the purpose of this guidance includes, but is not restricted to, roads, streets, footways, footpaths and cycle routes.
HMEP	Highway Maintenance Efficiency Programme
HMS	Highway Management System (County Council's is Symology's Insight)
HRA	Hot Rolled Asphalt
IHMC	Integrated Highway Management Centre
IMO	The County Council's Infrastructure Management and Operations Directorate
IWP	Integrated Forward Works Programme
KPI	Key Performance Indicator
LA	Local Authority
Service Standards	A statement of the performance of the asset in terms that the stakeholder can understand. They cover the condition of the asset and non-condition related demand aspirations, i.e. a representation of how the asset is performing in terms of both delivering the service to stakeholders and maintaining its physical integrity at an appropriate level. Service Standards typically cover condition, availability, accessibility, capacity, amenity, safety, environmental impact and social equity.
Lifecycle Plan	A considered strategy for managing an asset, or group of similar assets, from conception construction (planning and design) to disposal. A lifecycle plan should give due consideration to minimising costs and providing the required performance.
LTP	Local Transport Plan
Maintenance	A collective term used to describe all the activities and operations undertaken to manage and maintain highway assets, e.g. inspection, assessment, renewal, upgrade etc.

Terminology	Definition
Maintenance Strategy	The overarching approach to maintenance that is aimed at delivering the overall Asset Management Strategy and associated performance targets.
Monitoring	Observation or measurement repeated periodically or continuously over time.
NI	National Indicators
OSGR	Ordnance Survey Grid Reference
Owner	A collective term used to refer to any owner of a highway asset, i.e. highway authorities and other owners. Also see authority.
PAS55-1 (and 2)	Publicly Available Specification 55-1 (and 2)
PMS	Pavement Management System (County Council's is WDM)
Performance	A term used to describe the service delivered as measured by a series of levels of service. It comprises both condition and non-condition measures (i.e. safety, accessibility, etc).
Performance Measure	A generic term used to describe a measure or indicator that reflects the performance and/or condition of an asset, e.g. Best Value Performance Indicators.
PROW	Public Right of Way
RCI	Road Condition Index – used to assess road condition
Residual Risk	Remaining risk after implementation of risk treatment or control
Reconstruction	Surfacing technique that replaces all layers of a road / footway
Resurfacing	Surfacing technique that replaces the top layer of a road / footway
Risk	Chance of something happening that will impact on objectives
Risk Assessment	The process of risk identification, risk analysis and risk evaluation
Risk Evaluation	Comparison of the risk score against the risk tolerance
Risk Identification	The process of determining what, where, when, how and why something could happen
Risk Management	The chance of something happening which will have an impact on corporate, departmental, tactical, operational or project objectives
Risk Reduction	Action taken to lessen the likelihood, negative consequence or both
ROW	Rights of Way
ROWIP	Rights of Way Improvement Plan
RTPI	Real Time Passenger Information
SCANNER	Surface Condition Assessment of the National Network of Roads

Terminology	Definition
SCRIM	Sideway-force Coefficient Routine Investigation Machine
Stakeholder	An individual, group, body or organisation with a vested interest in the management of the transport network, e.g. authority/owner, public, users, community, customers, shareholders and businesses.
SUDS	Sustainable Drainage System
Surface Treatment	Preventative surfacing that prolongs the life of a road / footway. (surface dressing, slurry seals, micro asphalts, asphalt rejuvenators)
Treatment Option	A possible treatment type that can be used for the maintenance of an asset.
UKPMS	United Kingdom Pavement Management System
Value Engineering	Development of optimal solutions for prioritised maintenance needs using option appraisal, whole life costing, scheme development, and synergies with other highway schemes.
Value Management	Assessment and prioritisation of identified maintenance needs.
WGA	Whole Government Accounts
Whole Life Cost	Total cost of the asset over the term of its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal.
Workbank	All outstanding routine maintenance work that currently exists on the network that is held on the HMS.

Cambridgeshire County Council

Appendices

Appendix I - Reactive Maintenance intervention Levels

Appendix II – Communications Strategy

Appendix III – BCI and RCI Indices

Appendix IV – Transport Delivery Plan Flow Charts

Appendix V – Highway Standards and Enforcement

Appendix VI – Life Cycle Plans

Appendix VII – Skid Resistance Policy

Appendix VIII - Adoption of Non-Motorised User (NMU) Routes and the Adoption of additional maintenance liability

Appendix I

Reactive Maintenance Intervention levels

Item		Defect	Category 1 defects	Response times	Category 2 defects	Response times
Carriageway	Strategic and Main Distributor	Pothole/spalling	40mm depth (75mm across in any horizontal direction)	5 days	20mm depth (75mm across in any horizontal direction)	Planned maintenance programme (Priority D)
		Gap/crack	40mm depth (> 20mm width)	5 days	20mm depth (>20mm width)	Planned maintenance programme (Priority D)
		Ridge, Hump, Depression/sunken cover	40mm depth	5 days	20mm depth	Planned maintenance programme (Priority D)
		Surface Crowning	75mm high and less than 300mm wide	5 days	Outside of scope for intervention	Not applicable
	Secondary Distributor	Pothole/spalling	50mm depth (75mm across in any horizontal direction)	5 days	40mm depth (75mm across in any horizontal direction)	Planned maintenance programme (Priority D)
		Gap/crack	50mm depth (> 20mm width)	5 days	40mm depth (>20mm width)	Planned maintenance programme (Priority D)
		Ridge, Hump, Depression/sunken cover	50mm depth	5 days	40mm	Planned maintenance programme (Priority D)
		Surface Crowning	75mm high and less than 300mm wide	5 days	Outside of scope for intervention	Not applicable
	All other roads	Pothole/spalling	50mm depth (75mm across in any horizontal direction)	5 days	Outside of scope for intervention	Not applicable
		Gap/crack	50mmdepth (> 20mm width)	5 days	Outside of scope for intervention	Not applicable
		Ridge, Hump, Depression/sunken cover	50mm depth	5 days	Outside of scope for intervention	Not applicable
		Surface Crowning	75mm high and less than 300mm wide	5 days	Outside of scope for intervention	Not applicable

Item		Defect	Category 1 defects	Response times	Category 2 def
Cycleway (part of Carriageway)	Strategic and Main Distributor	Pothole/spalling	40mm high/deep (75mm across in any horizontal direction)	5 days	20mm depth (75 horizontal directi
		Gap/crack	40mm high/deep(> 20mm width)	5 days	20mm (>20mm v
		Ridge, Hump Depression/sunken cover	40mm high/deep	5 days	20mm
	Secondary Distributor	Pothole/spalling	40mm high/deep (75mm across in any horizontal direction)	5 days	20mm depth (75 horizontal directi
		Gap/crack	40mm high/deep(> 20mm width)	5 days	20mm (>20mm v
		Ridge, Hump Depression/sunken cover	40mm high/deep	5 days	20mm
	All other roads	Pothole/spalling	40mm high/deep (where metalled) (75mm across in any horizontal direction)	5 days	Outside of scope
		Gap/crack	40mm high/deep (where metalled)(> 20mm width)	5 days	Outside of scope
		Ridge, Hump, Depression/sunken cover	40mm high/deep (where metalled)	5 days	Outside of scope

Item		Defect	Category 1 defects	Response times	Category 2 def
Footway and Cycleway	Category 1a, 1 & 2 footways	Trip/pothole/sunken cover	25mm high/deep (75mm across in any horizontal direction)	36 hours	20mm depth (75 horizontal direct
		Rocking slab/block	25mm high/deep	36 hours	20mm vertical m
		Open joint	More than 25mm wide and more than 25mm deep	36 hours	More than 20mm 25mm deep
		Depression	More than 25mm deep and more than 600mm wide in any horizontal direction	36 hours	20mm depth (10 horizontally)
	Others	Trip/pothole/sunken cover	25mm high/deep (75mm across in any horizontal direction)	36 hours	20mm depth (75 horizontal direct
		Rocking slab/block	25mm high/deep	36 hours	20mm vertical m
		Open joint	More than 25mm wide and more than 25mm deep	36 hours	
		Depression	More than 25mm deep and more than 600mm wide in any horizontal direction	36 hours	20mm depth (10 horizontally)
Kerbs, Edging and Channels		Misaligned/ Loose/rocking	50mm horizontally/vertically	36 hours	20mm horizonta
		Missing	Missing kerb	36 hours	Not applicable
Verges		Sunken area adjacent and running parallel with c/way edge	150mm depth and 5m longitudinal	5 days	Outside of scop

Item		Defect	Category 1 defects	Response times	Category 2 def
Iron works	Carriageway	Gaps within framework (other than designed by manufacturer)	Present	2 hours	See c/w interver
		Level differences within framework	20mm	36 hours	See c/w interver
		Rocking covers	20mm	36 hours	Maximum heigh intervention leve
		Cracked/broken covers	No Cat 1 defect		Present
		Worn/polished covers	No cat 1 defect		Present
		Missing covers	Missing	2 hours	N/A
	Footway/ Cycleway	Gaps within framework (other than designed by manufacturer)	Present	2 hours	N/A
		Level differences within framework	20mm high/deep	2 hours	N/A
		Rocking covers	20mm high/deep	2 hours	See f/w interven
		Cracked/broken covers			Present
		Worn/polished covers			Present
		Missing covers	Missing	2 hours	N/A
	Verge	Missing cover or damaged cover	Yes	2 hours	N/A

Item		Defect	Category 1 defects	Response times	Category 2 def
Road Markings	Strategic	Missing	Give Way, Stop lines	5 days	N/A
		Faded or worn markings			Where 30% loss marking, refer to and studs polic Standards and E appendix
	Distributors	Missing	Give Way, Stop lines	5 days	N/A
		Faded or worn markings			Where 50% loss marking, refer to and studs polic Standards and E appendix
	Local & Link	Missing	Give Way, Stop lines	5 days	N/A
		Faded or worn markings			Where 70% loss marking, refer to and studs polic Standards and E appendix
	Footways and Cycleways	Missing	Give Way, Stop lines	5 days	N/A
		Faded or worn markings			70% loss of effe
Road Studs		Missing stud leaving hole	As carriageway/footway/cycleway pothole intervention criteria		N/A
		Displaced item on carriageway, footway or cycleway	Remove	2 hours	N/A
Signs & traffic signals		Damaged/misaligned item causing a hazard	Present	2 hours	N/A
		Missing or obscured item	Present	2 hours	N/A

Item	Defect	Category 1 defects	Response times	Category 2 def
Hedges and trees	Unstable tree causing danger of collapse onto highway	Present	2 hours	N/A
	Overhanging tree leading to loss of height clearance over carriageway, footway or cycleway	No Cat 1 Response	N/A	Over Carriagew
				Over Cycleway
				Over Footway
Highway general	Oil/debris/mud/stones/gravel likely to cause a hazard	Present	2 hours	N/A
	Illegal signs	Causing a safety hazard	2 hours	Not causing a s
	Obstructions in the highway	Causing a safety hazard	2 hours	N/A
	Obstructed sight lines	Causing a safety hazard	2 hours	N/A
	Unauthorised ramps in carriageway	Causing a safety hazard	2 hours	Not causing a s
	Embankment and cuttings apparently unstable	Present	2 hours	N/A
Other dangers to the public	Anything else considered dangerous	Yes	2 hours	N/A
Graffiti Removal from County Council owned assets	Graffiti will be removed from CCC owned assets that is: • offensive, gang related, insulting or against public interest • likely to encourage more graffiti or tagging • inappropriate for the location or out of keeping with the surrounding area • a cause of complaints to the Council • on a listed building or in a conservation area	For offensive graffiti	5 days	For other graffiti

Appendix II

HIAMP Communications Strategy

1. Executive Summary

1.1 This strategy supports the Highways Infrastructure Asset Management Plan (HIAMP). The Strategy sets out how the implementation of the asset management approach will be communicated to stakeholders and emphasises the benefits of asset management.

1.2 This strategy aims to provide information for use by Environment, Transport and Economy (ETE) staff, the Corporate Communications Team and Members.

1.3 This strategy is designed to provide a clear framework for relevant information associated with asset management to be actively communicated through engagement with relevant stakeholders in a consistent, co-ordinated and considered approach.

2. Background and Vision

2.1 The HIAMP intends to maximise the life of highway assets by adopting a longer term approach in the selection of schemes requiring maintenance interventions. Communication of this approach, as well as the way that work is undertaken needs to be in accordance with Local Government communication objectives, in particular the aims of the ETE Community Engagement Strategy.

2.2 Activities delivered under the HIAMP can be split into three categories for the purposes of communications – planned, cyclic and reactive.

2.2.1 Planned activities include improvement schemes, planned maintenance works and other projects that have developed ahead of time.

2.2.2 Cyclic activities are the regular works that take place periodically. These include surface dressing, grass cutting, gully cleansing, weed treatments and gritting.

2.2.3 Reactive activities present the most common form of public interaction – reported potholes and other highway faults.

3. Objectives

3.1 Communications should be in line with the ETE Community Engagement Strategy, with particular focus on the following elements:

- Communicate through a variety of channels, including social media
- Be clear about the level of influence stakeholders have
- Be open and make information available
- Use consistent messages
- Manage expectations
- Be digital by design and make use of corporate social media resources

In addition, communications should

- use Plain English (see guide here http://www.plainenglish.co.uk/free-guides.html)
- be tailored to their target audience or medium
- direct to further resources when appropriate
- be proactive about keeping the public informed about how 'their' money is being spent

3.2 Communications should align with Cambridgeshire County Council's ethos of community engagement, providing a consistent, friendly approach. In addition to the use of plain English, authoritative, demanding or absolute language should only be used when absolutely necessary.

3.3 Communication is proactive; Members of the Public are informed of planned work in advance and completed work is publicised, raising the profile of HIAMP activities.

4. Audiences

4.1 Engaging with stakeholders to understand their needs and expectations provides the information needed to determine and review the service of asset management activities.

4.2 Externally, the highway network is often of significant interest to the public, Local Members and the media. Internally, highway activities are of interest to Major Infrastructure Delivery (MID), Transport and Infrastructure, Policy and Funding (TIPF), and the Highways Service.

4.2.1 Reactive activities represent the majority of public interactions with the service. Communication in this area has been poor historically and represents a great opportunity to look at lessons learnt and make significant improvements.

4.2.2 Involvement of members will be either at a local member level through spokespersons or the relevant committee as appropriate. Whilst selection of highway maintenance work will be driven predominantly by condition criteria, the role of local members to challenge is vital in ensuring that local priorities are incorporated into delivery plans.

4.2.3 All communication with the Media will be through the Corporate Communications Team. Consistent messaging will be essential and improved liaison internally will help achieve this.

4.2.4 WithInternal Staff, ensuring a consistent programme of communications throughout these teams should be considered a long term aim. Improved liaison between corporate communication, Community Engagement within MID/TIPF and Highwaysstaff should be considered an area for development within ETE.

4.3Stakeholder analysis

Influence	High	***(Keep Satisfied)*** Department of Transport (DfT)	***(Key Players)*** Members ETE/HighwaysManagement Cambridgeshire Highways Local Media
	Low	***(Monitor)*** -	***(Keep Informed)*** Town and Parish Councils Local Community Groups General Public Contact Centre District Councillors
		Low	High
	Interest		

Table 1 – map of stakeholders scored against their influence and interest

5. Communication Tools and Activities

5.1 Cambridgeshire County Council must ensure it is working in an open and transparent way, asset management activities are of no exception. The Authority therefore needs to ensure a wide range of information is easily available, and accessible, to the public.

5.2 Cambridgeshire County Council must communicate how decisions are made in the assessment, programming and delivery of asset management activities, including maintenance works.

5.3 No additional branding is required for the HIAMP. All communications should adhere to the County Council's normal branding requirements.

5.4 Communications tools – Cambridgeshire County Council has a variety of communication processes in place to provide transparency in the planned, cyclic and reactive maintenance approach using a range of channels to reach as many audiences as possible:

Engagement	Target	Tool	Regularity/details	Responsibility
Key Players	Members ETE/HighwaysManagement Cambridgeshire Highways	Face to Face meetings	As required to discuss development and future changes	Highways Asset Manager / Head of Highways
Keep Informed	General public	Press releases	Key seasonal milestones, large consultations and notable changes to policy	Corporate Communications
		Highways Fault Reporting Tool	Every report made resulting in standard emails to customer.	Asset Systems Manager / Highways officers
		Social Media	Seasonal, end of projects etc. regular positive messages and engagement	Highways officers
	Contact Centre/District Councillors/Local Community Groups	Direct Email	Start of seasonal works, relevant projects, changes to policy etc.	Highways Officers
	Town and Parish Councils	LHO liaison	Daily/weekly as appropriate to establish new patterns of work	LHOs
Keep Satisfied	DfT	Web	Monthly statistics	Asset Systems Manager
		Direct report	As required for additional funding	Highways management
Monitor				

Table 2 – Table of audience related communication tools

5.5 Planned activities

5.5.1 On successful completion of a project / activity, consideration should be made to promoting outwardly through an appropriate media outlet (Website, Press release, Social Media etc.) In addition, a ‘factsheet’ has been developed to remind Highwaysstaff to engage with members throughout planned works. This ensures members can help staff communicate our plans and decisions adequately to the public. All communications should be issued by the officer managing the works, channelled also to corporate

communications for use in social media. If works required a road closure, IHMC should be informed when the road is reopened.

5.5.2 Planned activitiesshould all be included in the Transport Delivery Plan (TDP). It has been noticed that there is potential to improve our communication regarding schemes within the TDP. Because TDP schemes are planned in advance there is an opportunity to inform stakeholders about the works in advance. A project is therefore under way to create an interactive, publically accessible map that shows all TDP projects months in advance. The works will be colour co-ordinated and seen as 'pins' on a map detailing the extent of the works planned. Ensuring that this project is completed and kept up to date should be included as part of the HIAMP project.

5.5.3 An accompanying downloadable TDP could also be written for public consumption, with complex tables and figures confined to appendices. Press release and social media should announce updates to the TDP.

5.6Cyclic activities

5.6.1 There is an existing communications plan associated with cyclic activities. The plan aligns with this strategy. Key stakeholders receive copies of planned schedules and a press release is arranged before the start of a work programme. For surface dressing, which has a higher profile due to traffic disruption, affected streets are published via the web and social media, with daily updates being directed through @cambs_traffic twitter feed held by IHMC and picked up by corporate Twitter and Facebook channels when appropriate. Full details can be found in the Cyclic Communications plan at the end of this appendix.

5.7 Reactive activities

5.7.1 Cambridgeshire County Council has been taking fault reports online for over 4 years; however improvements have been identified through lessons learnt. Therefore a new improved Fault Reporting System is being implemented to allow residents to report a range of highway faults, such as potholes, signage, flooding, traffic lights and street lighting.

5.7.2 The new system answers much of the criticism levelled at the previous fault reporting site where users' responses suggested it was difficult to understand if work was being actioned or not due to poor communication feedback. The new system will improve on this and provide timely information about how a fault is being progressed on the site and via automated emails.

5.7.3 Feedback on the current system has been received from residents, local councillors from all tiers, as well as local citizen journalists and bloggers.

5.7.4 Improving the online fault reporting system will also help save the taxpayer money. The cost of recording a fault online is £0 compared to a reporting via the Contact Centre which costs up to £3. In 2013, the contact centre took over 17,500 calls which could have been dealt with by the customer online. Over a year we could therefore potentially save around £40,000.

5.7.5 The launch of the new system comes at a time when the Digital First agenda aims to reduce costs by encouraging people to use online local government services. The new Fault Reporting System will be tested for 1 month prior to an official launch. This offers local people the chance to give their views and feedback on the new site. For this a SmartSurvey has been set up to analyse responses. We want to make sure that the site works to its best ability and ensure all lessons learnt are incorporated into the new site.

5.7.6 Taking on board feedback and lessons, the new Fault Reporting Systemwill include:

- Full screen mapping
- The app works on any device, including iPhone and Android devices
- You can attach a photo of the defect to your report
- Status updates are seamless and detailed
- Holistic customer experience, allowing redirection to other highways related services, for example street lighting.

5.7.7 Alongside the new Fault Reporting System, a further improvement has been identified. When reported faults are not scheduled to be fixed, due to them not reaching our intervention level criteria, a new webpage has been developed to detail these criteria in a more user friendly and accessible format. Currently, the HIAMP reactive maintenance intervention levels are appended to the HIAMP, an 81 page document. Many calls were being transferred to LHOs from people complaining that their reported issue isn't being fixed, therefore this new page details simply our intervention levels, reducing these calls.

5.7.8 The more accessible and user friendly process of reporting a highway fault to the authority will ensure we act in an open and transparent way, as set out in the objectives above. By acting in an open way, the decision making process for reactive activities is clear. Making our intervention levels accessible and creating a 'one stop shop' for all highway issues demonstrates how the authority makes its decisions and communicates this clearly to the customer. This also helps to manage expectations.

5.7.9 With the new Fault Reporting System in place, users will not have to manually track their reported fault. Instead, a traffic light system will be used with green, yellow, amber and red pins. At each stage an automated email will also be sent informing the reporter of how we are progressing and next steps.

5.7.10 The aim of this new system is ultimately to demonstrate the challenging financial constraints the authority is facing, making the best use of the available funds which ultimately keeps the whole network in the best condition possible.

5.7.11 Highway defects are a major area of requests for the service and can include complaints or claims. This new process will improve our quality of communication providing a high quality service.

6. Risks

6.1 Resources – with HIAMP changes affecting an extremely wide range of activities, it is vital that any communication plan is consistently achievable with the resources available.

6.2 Raised expectations – the direction proposed by this strategy increases the amount of information given to the public about work being undertaken on Cambridgeshire's highways. It is important to ensure that this does not create an appetite for further communication that would place an unreasonable burden on services.

6.3 Data integrity – with a drive towards digital by design and the use of online mapping to demonstrate planned and potentially cyclic activities, it is vital that digital records are kept in one place and that is the source referred to by all parties. Officer use of individual or offline records is likely to result in misinformation for the public.

Cyclic communication plan

Workstreams

1. Green Maintenance
2. Winter Maintenance
3. Gullies/Flooding
4. Surface Dressing

Levels of communication

- County
  - Countywide information
  - Press releases ("That time of year again", facts, promotion)
  - Generic – sent to all Council levels and areas
- Parish / Town
  - Drawn from works programme
  - Targeted to individual parishes
  - Specific information sent to specific Councillors
- Street
  - Letter drop to residents
  - On street signage
  - Works process leaflet (from contractor) to residents
- Road user
  - IHMC daily tweet of roads affected by works

Set up

Establish distribution lists (groups that need contacting e.g. emergency services etc.) for each work stream with business support. Business Support should then manage the lists to keep them up to date (changes to councillors, staff etc), but Network Management remain responsible for asking for groups to be added/removed.

1. 'Green' Maintenance (grass cutting, tree works, weed spraying)

Start of programme:

- Create works program with locations and intended dates. Append the following statement and save to pdf. "The programme shown here is for guidance only and should not be published as definite. Work can be affected by a number of factors including weather conditions and the date or duration of works is subject to change without notice."
- Send pdf to business support for distribution to affected County, District and parish Cllrs, LHOs etc. (as per agreed distribution list).

- Contact corporate communications to arrange a positive press message about the programme – “With recent rainfall and the approaching summer, the County Council is springing into action to keep highway verges trim and trees under control…”

Daily during programme
If any works are likely to cause a delay, ensure that notification is sent to ihmc@cambridgeshire.gov.uk for twitter

2. Winter Maintenance

Start of programme
- Make sure the gritting maps (interactive and pdf) online are up to date for the season
- Contact corporate communications to arrange positive press message about winter maintenance – “The County Council’s fleet of gritters stands ready to keep Cambridgeshire moving if cold weather draws in…” ensure that this release mentions the ability to check routes online and the work of winter volunteers

Daily
- If gritting takes place, email ihmc@cambridgeshire.gov.uk to keep them informed. Make sure this includes requests for winter volunteers

3. Gullies/Flooding

Start of programme
- Create works program with locations and intended dates. Append the following statement and save to pdf. “The programme shown here is for guidance only and should not be published as definite. Work can be affected by a number of factors including weather conditions and the date or duration of works is subject to change without notice.”
- Send pdf to business support for distribution to affected County, District and parish Cllrs, LHOs etc. (as per agreed distribution list)
- Contact corporate communications to arrange a positive press message about the programme – “The heavy rainfall in recent seasons underlines the important work of ensuring that our roads drain properly…”

Daily
- Send updates on any flooding to ihmc@cambridgeshire.gov.uk (in line with normal flood procedure)

4. Surface Dressing

Start of programme
- Works program with locations and intended dates uploaded on the CCC corporate website prior to works commencing informing stakeholders of our intended schedule. This will be updated on a weekly basis as work can be affected by a number of factors including weather conditions and the date or duration of works is subject to change.
- Send pdf to business support for distribution to affected County, District and parish Cllrs, LHOs etc. (as per agreed distribution list).

- Contact corporate communications to arrange a positive press message about the programme – “The County Council is about to begin its annual programme of surface dressing…”
- A new information leaflet has been created to help our pro-active engagement with properties affected by the works. Homes adjacent to the works will receive a ‘what to expect’ leaflet with FAQs.
- Increased number of signs will be erected on site around 7 days before works begin with a letter from Skanska detailing the dates of the works.
  Daily updates on the resurfacing programme will be posted on twitter @cambs_traffic and the Council’s Facebook page

Appendix III

Road Condition Index - RCI

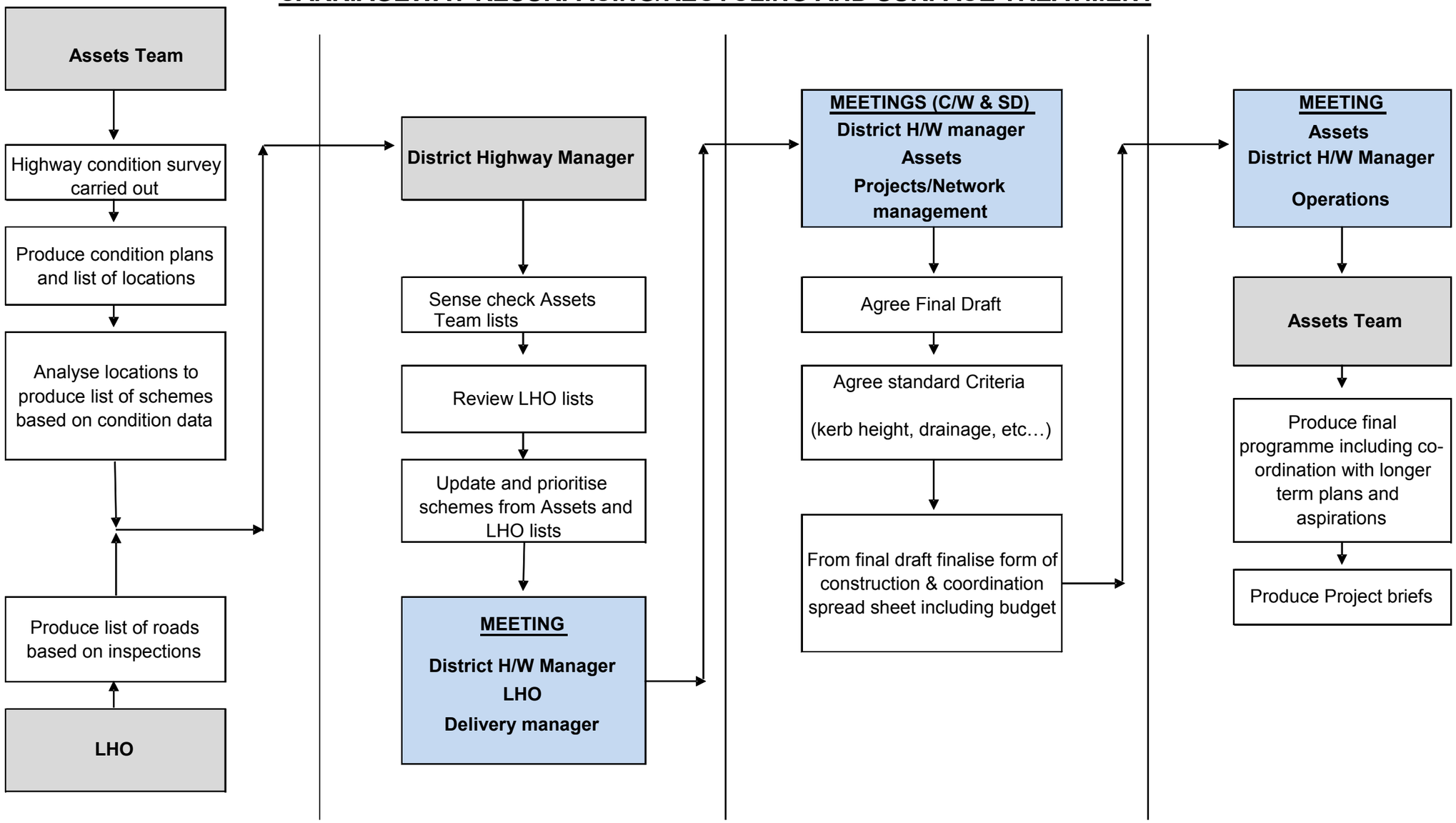
RCIScore Range	RCI Road Condition Description	RCI Road Condition Description
Between 0 & 40 Green	Good Condition	Minor defects and/or deterioration
Between 40 & 80 Amber 2	Plan investigation soon	Moderate defects and/or deterioration present)
Between 80 & 100 Amber 1	Plan investigation soon	Significant defects and/or deterioration present)
100 + Red	Plan maintenance soon	Major defects and/or deterioration

Bridge Condition Index - BCI

BSCI Range	Bridge Stock Condition based on BSCIav	Bridge Stock Condition based on BSCIcrit
100–95 Very Good	Bridge stock is in a very good condition.	Very few critical load bearing elements may be in a moderate to severe condition. Represents very low risk to public safety.
94–85 Good	Bridge stock is in a good condition	A few critical load bearing elements may be in a severe condition. Represents a low risk to public safety.
84–65 Fair	Bridge stock is in a fair condition	Wide variability of conditions for critical load bearing elements, some may be in a severe condition. Some bridges may represent a moderate risk to public safety unless mitigation measures are put in place.
64–40 Poor	Bridge stock is in a poor condition	A significant number of critical load bearing elements may be in a severe condition. Some bridges may represent a significant risk to public safety unless mitigation measures are put in place.
39–0 Very Poor	Bridge stock is in a very poor condition.	Many critical load bearing elements may be unserviceable or in a dangerous condition. Some bridges may represent a high risk to public safety unless mitigation measures are put in place.

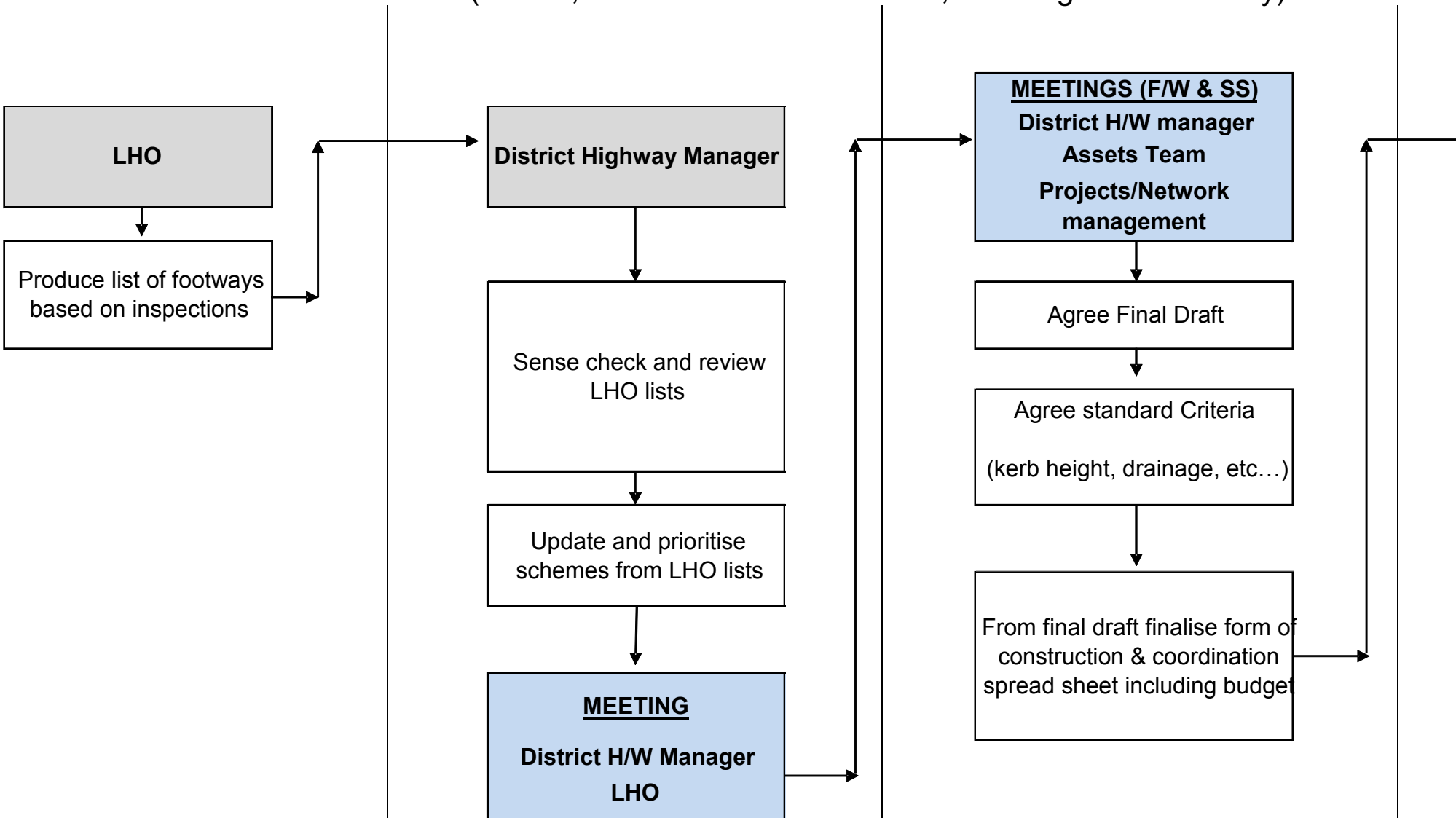
Appendix IV

CARRIAGEWAY RESURFACING/RECYCLING AND SURFACE TREATMENT

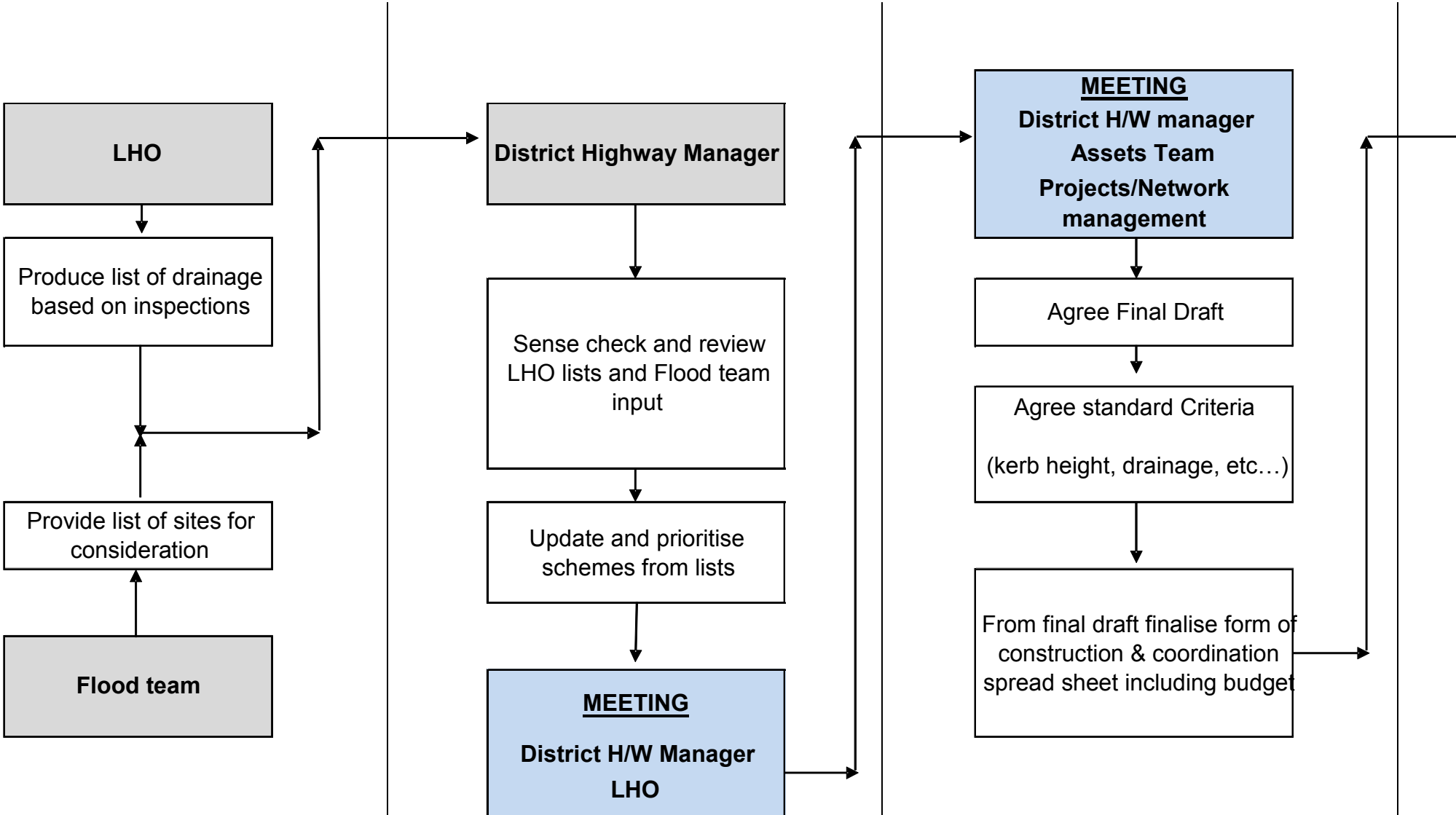


FOOTWAY/CYCLEWAY RESURFACING & SLURRY SEALING

(Cat 1a, 1 & 2 for f/w maintenance; all categories for Slurry)



DRAINAGE


LHO
Produce list of drainage based on inspections
Provide list of sites for consideration
Flood team
District Highway Manager
Sense check and review LHO lists and Flood team input
Update and prioritise schemes from lists
MEETING
District H/W Manager
LHO
MEETING
District H/W manager
Assets Team
Projects/Network management
Agree Final Draft
Agree standard Criteria
(kerb height, drainage, etc…)
From final draft finalise form of construction & coordination spread sheet including budget

Cambridgeshire County Council

Cambridgeshire County Council's

Highway Standards and Enforcement

Revised November 2016

Cambridgeshire County Council

Highway Standards and Enforcement

CONTENTS

1. Introduction

This document sets out the standards that apply to the operation of the highway network in Cambridgeshire excluding the rights of way network, motorways and trunk roads. The document identifies areas of highway enforcement and the process by which the enforcement is undertaken.

The Standards and Enforcement document has been drafted to contain standards that are necessary to:

- ensure safety
- comply with legislation
- manage the risk of litigation or claim
- protect the council's reputation
- encourage investment by third parties
- embrace the Localism agenda
- focus on local priorities

This is Cambridgeshire County Council's list of standards related to the operation of the highway. Whilst we have endeavoured to capture the majority of topics, the list is by no means exhaustive. Each standard provides a statement of intent and where appropriate links to the available supporting documentation, standard forms and guidance as appropriate.

2. A-Boards

A-Boards may require planning permission from your District or City Council. A-boards should be on private land off the Highway, or within the tables and chairs enclosure (subject to having a valid table and chair licence) to:

- Minimise clutter
- Support traffic management
- Promote safety
- Support local business

3. Abandoned Vehicles on the highway

Vehicles that are abandoned on the public highway are dealt with by the Environmental Health Department of the local District or City Council.

4. Access Protection

Access protection markings will normally only be permitted where the access has the necessary planning permissions (if required), a properly constructed footway crossing and dropped kerb and there is sufficient area of off-street parking availableappropriate to the length of marking requested. The property owner is expected to meet the cost of providing and maintaining any requested access protection marking.

Within locations where area wide parking controls are applied in line with county parking policy, existing access protection markings will be replaced by an ‘at any time’ waiting prohibition (double yellow lines) to facilitate parking enforcement, if required.

Access protection markings are white 'H' shaped lines painted onto a road andsituated in front of accesses to highlight dropped kerbs to other road users.They may be used to highlight any type of access or uncontrolled crossingpoint including vehicle accesses to properties (vehicle crossovers).

The marking is normally provided where the presence of a driveway is not obvious and the blocking of drives occurs on a regular basis by drivers other than residents. Anyone who applies for this facility is required to provide evidence of persistent problems in the form ofphotos, dates, times and if relevant, police incident report numbers.

As the markings are not legally enforceable, they should be used sparingly, and only where a problem is isolated and a Traffic Regulation Order could not be justified or easily enforced.

In the unlikely event that lines are removed due to resurfacing or excavations in the road we will try to replace them but cannot guarantee to do so. Repainting of APM’s will be undertaken as part of planned routine maintenance where possible.

Please note that there is a non-returnable fee for processing this service, and we will need payment before carrying out our investigations.

5. Banners on the Highway

Banners over the highway must be licensed. Applications will be considered for events organised to provide effective publicity for local charitable, cultural and educational events. Consent will not be given to any banner containing direct commercial or sponsorship advertising.

All banner licences will be subject to the applicant providing a minimum public liability indemnity of £5,000,000. The applicant must also provide a method statement for the erection of the banner, an emergency contact whilst the banner is in place and agreement that the erector of the banner will meet all costs incurred by the Highway Authority should it need to attend to the banner.

Flags or Sails attached to lamp columns do not require a licence but must have the approval of Cambridgeshire County Council’s Street Lighting service provider, who will ensure that the structure of the column is appropriate.

6. Bollards and Marker Posts

Bollards and marker posts may be installed on the highway to prevent vehicle overrun of footways or to define changes in carriageway alignment at sites where there is evidence of a safety problem.

Highway Authority approval must be obtained in writing, please contact the local highway officer for advice and guidance in the first instance.

7. Commuted Sums

Commuted sums will be paid to the council to support any increased cost of maintaining the adopted highway due to a development. Section 38(6) and 278(3) of the Highways Act 1980 provides the power to seek commuted sums from developers.

The council will require a commuted sum to cover the following adoptable items:

- where the materials chosen have a higher maintenance cost than those of conventional materials, this may include higher levels of street lighting than the standard specification;
- additional highway features only required due to the development; examples being structures and traffic signals;
- additional areas not required for the safe operation of the highway; an example would be trees or grassed areas beyond a required visibility splay;
- Sustainable Urban Drainage Systems (S.U.D.S.) and soakaways.

Where the existing network is modified due to 3rd party works a commuted sum will be payable by the 3rd party for any increase in maintaining the highway.

The table below shows the current charges for 2016/17:

	Item	Unit/Basis for calculation	Notes
1	Non-standard surface materials	m²	1 off replacement cost
2 3	Non-essential street furniture Trees	Works cost Each £560	1 off replacement cost
4	Soakaways	Each £5,225	
5	SUDS	Works cost	
4	Shrub beds/grass/landscaping	20 years maintenance	
5	Intelligent Transport Systems (ITS) including traffic signal junctions/crossings and electronic signs	20 years maintenance plus one replacement of equipment	
6	Traffic calming	20 years maintenance plus one replacement of non-standard features	
7	Bridges, tunnels, subways, culverts, retaining walls, head walls, sign and signal gantries, geotextile engineered embankments, fords, causeways and cattle grids.	ADEPT guidance: (Commuted sums for maintaining infrastructure assets)	Designed for a 120 year lifespan

8. Disabled Parking Bays

In residential areas, applications for disabled parking bays will only be considered where the following conditions exist:

- the applicant has no access to suitable off-road parking facilities
- the applicant holds a Blue disabled drivers badge
- the applicant is either the driver of the vehicle or the driver is resident at the same address as the applicant
- that a suitable location for the disabled bay can be found that is acceptable in terms of achieving a balance of parking provision
- that the application is supported by the local county councillor and the parish council (outside Cambridge)

If, for any reason, a disabled bay is no longer required in a particular street, it may be removed if:

- there is pressure for the space to be made available for other users; and
- its removal is supported by the parish council or in the case of streets in Cambridge, by local county councillor.

There are 2 different types of Disabled parking bay, these are the Advisory Disabled Bay and the Mandatory Disabled Bay the Highway Authority will assess each application to decide which bay is most appropriate.

9. Encroachment and obstruction

Any allegation of an encroachment/obstruction onto/on a highway will be notified to the land owner requesting appropriate action to remove the encroachment.

10. Gating Orders

Powers to close alleyways were first introduced by the Countryside and Rights of Way Act 2000 (CROW Act 2000); this enables alleyways, which are also Public rights of way, to be closed through 'special extinguishment and diversion orders' and gated for crime prevention reasons.

For a route to be eligible it must lie within a designated crime area, the application procedures for which are set out under the CROW Act. It is unlikely that any areas within Cambridgeshire would meet a request for such a designation. Such orders do not enable alleyways to be gated expressly to prevent anti-social behaviour (ASB) and they exclude many alleyways that are public highways but not recorded as rights of way. Also, under these provisions the removal of rights of passage is irrevocable.
PUBLIC SPACE PROTECTION ORDERS (PSPOs)

Public spaces protection orders (PSPOs) are intended to deal with a specific nuisance or problem in a particular area that is detrimental to the local community's qualify of life, by imposing conditions on the use of that area which apply to

everyone. PSPOs are dealt with by the local District or City Council. PSPOs were introduced in October 2014 by the Antisocial Behaviour, Crime and Policing Act 2014 and replace Gating Orders under section 129A of the Highways Act 1980.

General Principles

A PSPO is made by a Local Authority if satisfied that two conditions are met. Firstly, that

(i) activities carried out in a public place within the authority's area have had a detrimental effect on the quality of life of those in the locality; and
(ii) (ii) it is likely that activities will be carried out in a public place within that area and that they will have such an effect.

Secondly the restrictions imposed by the notice are justified if the activities are of a persistent, unreasonable nature.

A PSPO is an order that identifies the public place and prohibits specified activities in the restricted area and/or requires specified actions by persons carrying on specified activities in that area. The order may not have effect for more than 3 years and the Local Authority must consult with the chief officer of the police and the local Highway Authority before making an order.

Special extinguishment or diversion orders that remove the highway status of an alleyway, for crime prevention reasons, should continue to be made under the provisions of the CROW Act 2005 if a Secretary of State crime area designation can be achieved.

Temporary gating orders for crime or ASB prevention reasons, should be made under the Clean Neighbourhoods and Environment Act 2005 (Sections 129A to 129G of the Highways Act 1980).

Restrictions on Public Rights of Way

PSPOs are not the only solution to tackling crime and ASB on certain highways. Before proposing an order, consideration must be given to whether there are alternative measures that may be more appropriate for tackling the specific problems, which do not involve gating the highway. Government advice gives examples of the installation of security lighting and CCTV. PSPOs should be seen as a last resort.
Cambridgeshire County Council will only consider the use of a PSPO in the following circumstances:

i) when alternative solutions for tackling the specific problems being experienced, such as the installation of security lighting, CCTV, increased police officer surveillance or neighbourhood watch, have been fully investigated or tried and have been found to be ineffective or prohibitively more costly than erecting a barrier.
ii) on public highways (generally urban alleyways) where it can be shown that persistent crime and/or serious ASB is occurring and is expressly facilitated by the use of the public highway;
iii) where the order will not restrict the public right of way over a highway for the occupiers of premises adjoining or adjacent to the highway.
iv) where the order would not restrict the public right of way over a highway that is the only or principal means of access to a dwelling.

v) where the order will not restrict the principal means of access to premises used for business or recreational purposes during periods when the premises are normally used for those purposes.

Cambridgeshire County Council will expect any consultation to demonstrate that all the above can be met through documented evidence.

It should be remembered that the orders are not meant to be permanent solutions. If a PSPO is made then they may not have effect for a period of more than 3 years so that the effect of the order and other factors such as action to combat the sources of the ASB or a change in local circumstances such as redevelopment can be assessed and a decision taken as to whether the order needs to be varied or revoked.

11. Grit and Salt Bins

All grit/salt bins will be provided by the City/Town/Parish Council and located, at the agreed location, by the relevant Highway Area office.

The bin will be filled and replenished when resources are available. CCC will replace/repair any bin that was not bought by the City/Town/Parish Council prior to 2009. However, before the bin is replaced, CCC will assess its usage and make a judgment if it is still required and if it is, CCC will provide one. Future repair/replacement will be the responsibility of the City/Town/Parish Council.

It will be the responsibility of the City/Town/Parish Council to repair/replace any bin they have purchased after 2009 and those that have been replaced by CCC as detailed above. Requests that come in from a City/Town/Parish Council to position/fill bins on un-adopted roads will be considered only if the street is subject to a Section 38 agreement. The provision/filling/replenishment of the bin will be as described above. The positioning of the bin will be agreed by both the developer and CCC in order that the bin will not require repositioning on adoption.

12. Hanging Baskets

Hanging baskets provided by third parties may be permitted on street lighting columns with the approval of Cambridgeshire County Council's Street Lighting service provider, who will ensure that the structure ofthe column is appropriate and that the baskets would not interfere with the safe and convenient passage of highway users. The installation and maintenance of hanging baskets must be the responsibility of the third party who must provide evidence of the necessary level of public liability indemnity insurance.

13. Heavy Commercial Vehicle (HCV) Access Restrictions

Local Freight Issues

HGV movements can have a detrimental impact on local communities in termsof environmental intrusion and the perception of road safety. HGV traffic on Cambridgeshire's trunk 'A' roads is almost three times the national average and on non-trunk main roads it is 76% above the national average.

Enforcement
The Police are responsible for the enforcement of any existing Weight Limits.

What can be done to prevent HGV's from using certain roads
It is difficult to restrict the movement of HGV's as they are permitted to use any classification of road for access and deliveries even if there is a Weight Restriction in place (unless it is a structural weight limit e.g. weak bridge weight). As a main through route, HGV's are directed to use the most appropriate route via motorways, dual carriage ways and main roads.

The County Council's adopted advisory freight route map is intended to inform and influence decisions taken by HGV drivers when passing through thecounty or requiring access to sites within.

The map has been prepared to reflect the current situation on the network. The main HGV routes and abnormal load routes through the county have been identified, together with recommended access routes to sites that generate a significant number of HGV movements and existing physical and traffic regulation order HGV restrictions. The map can be viewed on our website.

HGV's are permitted to use any classification of road for access and deliveries. Only in exceptional traffic management circumstances can we consider the use of a Weight Limit Traffic Regulation Order (TRO) to reduce the movement of HGVs via structural restrictions (e.g. Weak Bridge) and environmental restrictions.

Implementing regulatory HGV management measures requires the making of a legal order, which involves a statutory consultation process that requires the Highway Authority to advertise, in the local press and on-street, a public notice stating the proposal and the reasons for it. The advert invites the public to formally support or object to the proposals in writing within a 21 day notice period. Should any objections be received then a report would go before Members for decision. The cost of the legal process is approximately £1,000. The cost of the signs will depend on the size and complexity of the limit. There is no existing Council funding available to introduce any new weight limits, therefore external funding would need to be identified by the requesting party

Advisory Signing
Advisory signs indicating that a road is not suitable for HGV's will not be considered for use on A and B class roads. Signs will only be considered on other roads if a survey shows that more than 10% of vehicles using the road are HGV's, without legitimate access. There is currently no existing Council funding available to carry out a survey or install new signs on the road, and therefore external funding would need to be identified by the requesting party.

Other options available to residents and communities
If particular haulage companies can be identified who continue to use the road as a through route when another main route is available, then we can contact them, making them aware that complaints from residents have been received, and advising them to use another route.

Regulatory HGV Management measures

Assessment

Any measures applied to the county road network to management HGV movements should:

- accord with the advisory freight route map
- accord with parking policies, if related to HGV parking matters
- be developed in partnership with local communities and the haulage industryusing the strategy assessment process (Diagram 1)
- consider all options with formal restrictions being the last resort unless necessary on structural grounds e.g. weak bridge weight restriction

The exposure index, which forms part of the assessment process, is intended to provide some benchmark comparator upon which to form a judgment over the degree of impact resulting from HGV movements in communities. It is recognised that it is, to some degree, subjective in nature but it is alsorecognised that no index will satisfy all conditions.

It is expected that local communities will be closely involved in the decision making process but where regulatory management measures are proposed through a traffic regulation order process, the final decision will rest with the county council.

Diagram 1

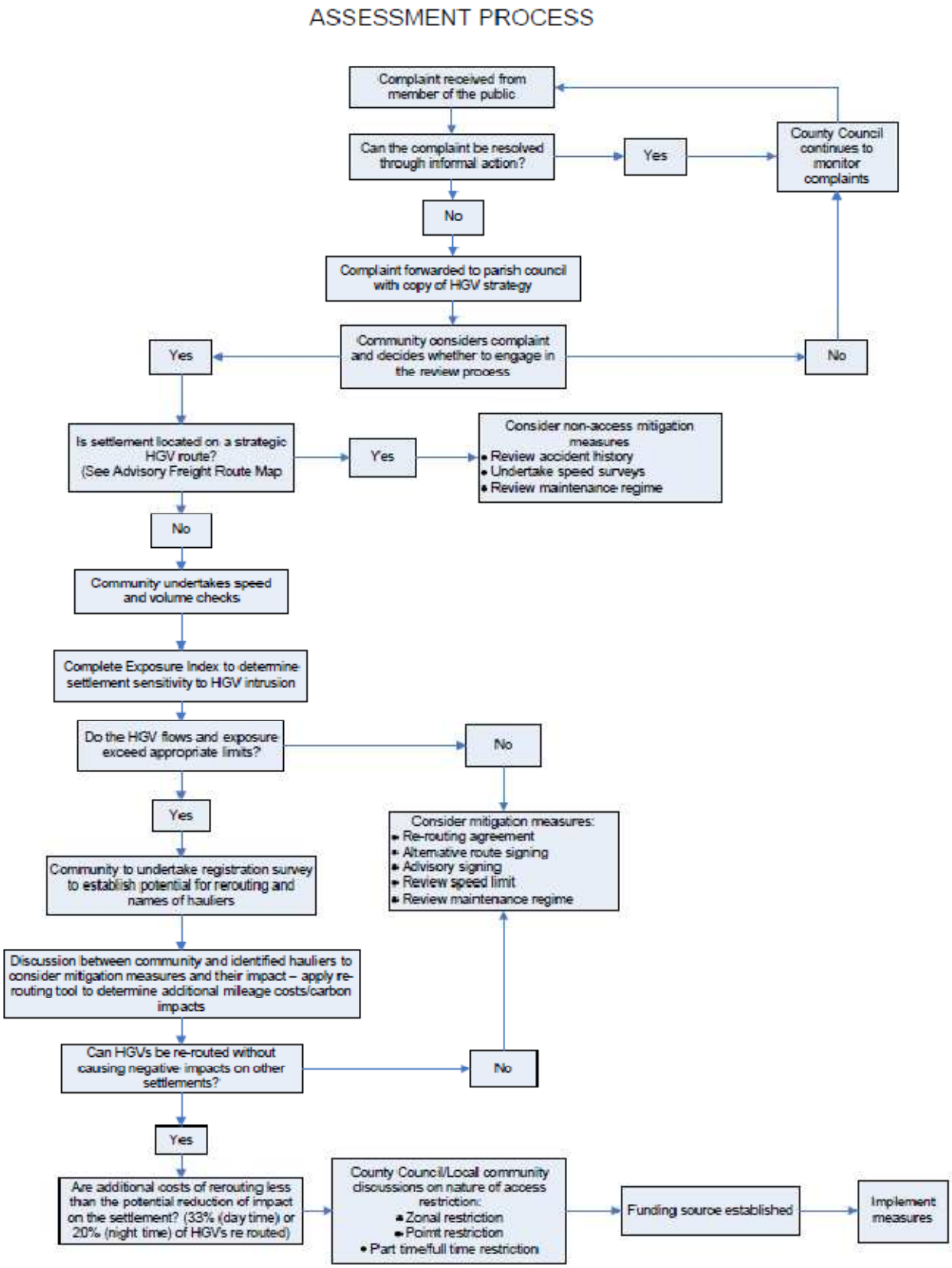

ASSESSMENT PROCESS
Complaint received from member of the public
Can the complaint be resolved through informal action?
Yes
County Council continues to monitor complaints
No
Complaint forwarded to parish council with copy of HGV strategy
Community considers complaint and decides whether to engage in the review process
Yes
No
Is settlement located on a strategic HGV route? (See Advisory Freight Route Map
Yes
Consider non-access mitigation measures
• Review accident history
• Undertake speed surveys
• Review maintenance regime
No
Community undertakes speed and volume checks
Complete Exposure Index to determine settlement sensitivity to HGV intrusion
Do the HGV flows and exposure exceed appropriate limits?
No
Consider mitigation measures:
• Re-routing agreement
• Alternative route signing
• Advisory signing
• Review speed limit
• Review maintenance regime
Yes
Community to undertake registration survey to establish potential for rerouting and names of hauliers
Discussion between community and identified hauliers to consider mitigation measures and their impact – apply re-routing tool to determine additional mileage costs/carbon impacts
Can HGVs be re-routed without causing negative impacts on other settlements?
No
Yes
Are additional costs of rerouting less than the potential reduction of impact on the settlement? (33% (day time) or 20% (night time) of HGVs re routed)
County Council/Local community discussions on nature of access restriction:
• Zonal restriction
• Point restriction
• Part time/full time restriction
Funding source established
Implement measures

Diagram 2

Environmental Sensitivity Criteria

Carriageway Width		
	Score	Description
Less Sensitive	0	Wide carriageway throughout - over 7.3m along entire length
	1	85% of carriageway width ≥7.0m
	2	85% of carriageway ≥6.8m
	3	85% of carriageway ≥6.6m
	4	85% of carriageway ≥6.4m
	5	85% of carriageway ≥6.0m
	6	85% of carriageway ≥5.8m
	7	85% of carriageway ≥5.6m
	8	85% of carriageway ≥5.4m
	9	85% of carriageway ≥5.2m
More Sensitive	10	85% of carriageway ≥5m

Footway Width		
	Score	Description
Less Sensitive	0	Wide footways throughout ≥4.00m along entire length
	1	Footways on both sides - 85% width ≥3.5m
	2	Footways on both sides - 85% width ≥3m
	3	Footways on both sides - 85% width ≥2.5m
	4	Footways on both sides - 85% width ≥2m
	5	Footways on both sides - 85% width<2m
	6	Footway on one side of carriageway only - 85% width ≥3m
	7	Footway on one side of carriageway only - 85% width ≥2.5m
	8	Footway on one side of carriageway only - 85% width ≥2m
	9	Footway on one side of carriageway only - 85% width <2m
More Sensitive	10	No footway along at least 15% of the entire length

Proximity of property frontage (i.e. front/rear door of property to kerb line)		
	Score	Description
Less Sensitive	0	10% or less of frontages <2m from carriageway
	1	15% of frontages <2m from carriageway
	2	20% of frontages <2m from carriageway
	3	25% of frontages <2m from carriageway
	4	30% of frontages <2m from carriageway
	5	35% of frontages <2m from carriageway
	6	40% of frontages <2m from carriageway
	7	45% of frontages <2m from carriageway
	8	50% of frontages <2m from carriageway
	9	25% of frontages <1m from carriageway
More Sensitive	10	50% of frontages <1m from carriageway

Total number of building frontages along route		
	Score	Description
Less Sensitive	0	Low number of frontages - fewer than 10
	1	Total number of frontages ≥10 <20
	2	Total number of frontages ≥20 <30
	3	Total number of frontages ≥30 <40
	4	Total number of frontages ≥40 <50
	5	Total number of frontages ≥50 <60
	6	Total number of frontages ≥60 <80
	7	Total number of frontages ≥80 <100
	8	Total number of frontages ≥100 <120
	9	Total number of frontages ≥120 <150
More Sensitive	10	High number of frontages - greater than 150

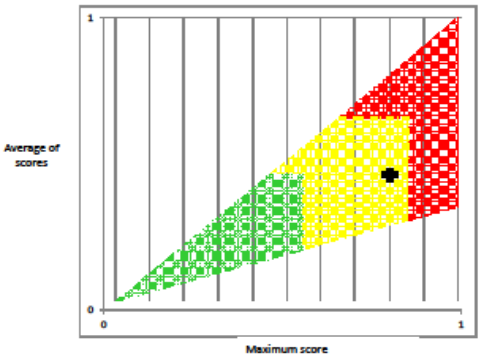
Average two-way pedestrian+cycle count (at 600m intervals or mid-point along route)		
	Score	Description
Less Sensitive	0	Low number of pedestrians+cyclists - fewer than 15/hour
	1	Total number of pedestrians+cyclists ≥15 <25
	2	Total number of pedestrians+cyclists ≥25 <35
	3	Total number of pedestrians+cyclists ≥35 <45
	4	Total number of pedestrians+cyclists ≥45 <55
	5	Total number of pedestrians+cyclists ≥55 <65
	6	Total number of pedestrians+cyclists ≥65 <75
	7	Total number of pedestrians+cyclists ≥75 <85
	8	Total number of pedestrians+cyclists ≥85 <95
	9	Total number of pedestrians+cyclists ≥95 <105
More Sensitive	10	Total number of pedestrians+cyclists > 105

Average sensitive locations fronting the route per kilometre		
	Score	Description
Less Sensitive	0	School/nursery/shop/playground/sheltered housing: No sites
	1	School/nursery/shop/playground/sheltered housing: 1 site per kilometre
	2	School/nursery/shop/playground/sheltered housing: 2 sites per kilometre
	3	School/nursery/shop/playground/sheltered housing: 3 sites per kilometre
	4	School/nursery/shop/playground/sheltered housing: 4 sites per kilometre
	5	School/nursery/shop/playground/sheltered housing: 5 sites per kilometre
	6	School/nursery/shop/playground/sheltered housing: 6 sites per kilometre
	7	School/nursery/shop/playground/sheltered housing: 7 sites per kilometre
	8	School/nursery/shop/playground/sheltered housing: 8 sites per kilometre
	9	School/nursery/shop/playground/sheltered housing: 9 sites per kilometre
More Sensitive	10	School/nursery/shop/playground/sheltered housing: >9 sites per kilometre

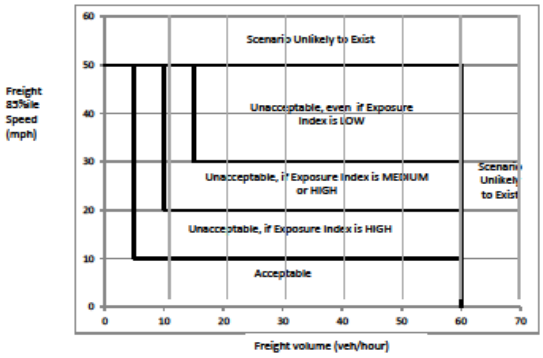
Example

Criteria	Score (max 10)
Carriageway Width	3
Footway Width	4
Frontage to Footway Distance	1
Number of Frontages along Route	6
Typical Pedestrian Count	7
Schools	8

Allocation of Site to Sensitivity Group	
Average of scores	4.67
Maximum score	8



This allows one very high score but other low scores to still be considered a high risk
This allows three fairly high scores to be collectively considered a high risk



14. Highway Charges

Charges are made for various elements of Network Management workand are displayed on the County Council website. These will be amended annually in line with the index associated with each charge.

15. Highway Scheme Funding

Third Party Funding of Highway features
Privately funded highway features may be installed on the public highway in the following circumstances:

- there is a safety problem which the proposed feature(s) would be expected to address;
- the proposed feature(s) could be installed safely (as demonstrated by a positive Safety Audit process);
- the provision of the proposed feature(s) would comply with current County Council policy;
- the proposed feature(s) are acceptable to the local community.

Local Highway Improvements
To assist communities in improving their local highways, the County Council provides funds annually towards improvement projects. Communities can enter an application for this funding, which will be assessed by an advisory panel of County Councillors for each District Council area of Cambridgeshire. The panels will take into account the views of local Parish Councils, before making recommendations on allocating the funding, so applicants should make sure they can demonstrate local support for their project before applying.

16. Horses on the Highway

If a horse/s is straying on the highway this should be reported to the police. If there is no danger of the horse getting on to the road but the horse is clearly sick, distressed or injured it should be reported to the RSPCA.

17. Indemnity for Highway Works

Any work the highway authority authorises on the county road network by a third party, other than a public utility of their agents, will be conditional on the third party demonstrating that it has in place public liability indemnity up to a minimum value of £5m for each and every potential claim.

18. Kerbing

Kerbing, subject to approval in writing from the County Council, may be provided in the following circumstances:

- As part of a Transport Delivery Plan project;
- Where required to protect pedestrians from vehicular over run of footway areas;

- To assist with drainage;
- To support the edge of the carriageway.

19. Memorials and Floral Tributes on the Highway

General

Any ban on the placing of road side tributes following fatal accidents would be difficult to enforce and potentially insensitive. In recognition of a possible need for bereaved relatives to visit the scene of an accident as part of the grieving process, any request from the police for traffic management support during any site visit for the purposes of placing a tribute will be treated sensitively and will be provided free of charge.

Floral Tributes

Any floral tributes left at the site should be allowed to remain for a period of not less than14 days, but generally not more than 30 days. The relevant District Highways Manager should arrange for collection and disposal at the end of the period. Sensitivity must be shown, with the bereaved being given the option of receiving any non-floral tributes which may be placed along with flowers.

Roadside Memorials

Roadside memorials, including 'green' memorials such as shrubs and bulb planting, should be discouraged as a matter of principle to address the potential safety risks associated with repeat visits. While some memorials may be very discreet and in allocation where they will not create any problem, the majority of situations will have some form of potential hazard. Any decision to remove any roadside memorial must be communicated to the bereaved through the Police Family Liaison Officer.

20. Mirrors on the Highway

The following criteria will be applied when assessing requests for traffic mirrors;

a. The site in question must have a demonstrable history of injury accidents where poor visibility is a contributory factor.
b. The reduced sightline must not be due to an object which can be realistically removed, such as a parked vehicle or overhanging foliage.
c. A mirror cannot be used to serve a private access onto the Highway

Mirrors placed on the highway can cause other highway users to be dazzled byheadlight or sun reflection. The judgements made about the speed and distance ofapproaching traffic can be distorted when using a mirror.Each application will be considered on its merits. If a mirrorplaced on the public highway is considered a hazard or is the subject of a complaint, itwill be removed without notice and placed in storage for retrieval by the owner for a 2week period before being recycled of disposed of.

Mirrors erected on private land may require planning approval which should be soughtfrom the relevant District Council.

21. Mud on the Highway

To report mud on roads in the county, contact Cambridgeshire constabulary on 101 who will assess the situation.

Prior to any activity likely to bring mud onto the highway, warning signs should be set up in both directions. However, signs in themselves do not prevent liability for accidents that occur. The placement of warning signs when no effort is being made to clean the road will not be permitted.

22. Parking

Parking controls will be introduced to regulate on-street, residential, Coach and Taxi parking, to assist the flow of traffic or to manage demand and achieve the efficient and fair use of the often limited space that is available for parking.

Parking controls should be developed on an area wide basis to ensure that the transfer of parking problems into neighbouring streets is minimised.

23. Pedestrian Crossings

The design of controlled pedestrian crossing facilities (Puffin, Toucan, Pegasus and Zebra) will be in accordance with all relevant current standards and will take into account all current design guidance. Any departure from current design standards and any significant departure from current design guidance must be approved by the Service Director, Infrastructure Management & Operations.

Choosing which crossing is most appropriate and indeed where it should go is a sometimes difficult job as there are many competing demands and criteria related to safety and amenity that must be fulfilled in order for the crossing to be well used and beneficial to the travelling public.

A PUFFIN CROSSING is a signal controlled pedestrian crossing where the lightscontrolling the pedestrians are on the near side of the road. The system also utilisessensors which detect the presence of pedestrians waiting at thecrossing and as they are crossing the road. If after pushing thebutton the pedestrian decides to cross before the 'green man'appears, the sensor detects this movement and canautomatically cancel the requested 'demand' if there is no oneelse waiting to cross.

A TOUCAN CROSSING is a signal controlledpedestrian crossing that also allows bicycles tobe ridden across.

A PEGASUS CROSSING is a signalised pedestriancrossing with special consideration for horse riders. At a minimum, these crossings are in the form of apelican crossing but simply have two control panels, one at thenormal height for pedestrians or dismounted riders, and anotherone two metres above the ground for the use of mounted riders.

A PARALLEL PRIORITY CROSSING isparallel pedestrian and cycle crossing which does not require the installation of signal controls.

A ZEBRA CROSSING is a pedestrian crossing consisting of alternating dark and light stripes on the road surface and belisha beacons (flashing amber globes on posts).These provide suitable crossing points where pedestrian flows are light and vehicle speeds low. Good visibility is essential. There is a risk that pedestrians feel they have absolute priority whereas some drivers may not observe zebra crossings in the same way that they would comply with traffic lights.

Requests for controlled crossings are assessed against two documents produced by the Department for Transport. These are Local Transport Note 1/95 "The Assessment of Pedestrians Crossings" and Local Transport Note 2/95 "The Design of Pedestrian Crossings". These documents can be found by clicking on the highlighted documents on the Department for Transport website.

The level of need for a crossing will need to be assessed by:

1. Measuring the degree of conflict between pedestrians crossing the road and the two-way traffic flow and

2. Taking into account the following factors
    - The age and ability of pedestrians
    - Any supressed demand
    - The different types of vehicle in the flow of traffic
    - The length of time pedestrians have to wait to cross
    - The width of the road
    - The speed of traffic
    - The pedestrian injury accident record at the site

Funding opportunities for improvements to the public road network are available via either the County Council's Local Highway Improvement (LHI) initiative or by third party funding.

Third party funding would need to cover the cost of the assessment, procuring and installing the measureand, in some cases, any ongoing operating costs wouldalso need to be covered.

The provision of developer funded pedestrian crossing facilities will be sought, through the planning process, at suitable locations.

24. Pedestrian Dropped Kerbs

Where dropped kerbs are provided to help those with mobility problems, wheelchair users and people with pushchairs they shall be set flush with the carriageway channel level. Tactile paving must be provided at all dropped kerbs where pedestrians can be expected to cross.

Kerbs will be dropped to provide pedestrian crossings during planned footway maintenance to help wheelchair users and people with pushchairs.

If you feel that a pedestrian crossing is needed please contact highways@cambridgeshre.gov.uk and one of our officers will meet with local disabled groups to assess the location and, if a crossing is needed, it will be included in future maintenance work.

25. Planters, Litter Bins, Seats and Cycle Stands

Planters, litter bins, seats and cycle stands may be permitted on the public highway as part of works to enhance or improve the environment, maintenance or the operation of the highway provided they do not interfere with the safe or convenient passage of highway users or the maintenance of the highway. Where provided by third parties they will be subject to the policy on third party funding of highway features although the need for a commuted sum may be substituted by a suitable maintenance agreement and as such will be considered on a case by case basis.

26. Religious Symbols on the Highway

Religious symbols on the public highway will only be permitted upon application, provided the applicants:

- Can demonstrate the symbol is to be displayed in connection with an event in their religion's calendar;
- Can demonstrate that the religion in question has a recognised place of worship within the city, town or village that the symbol was to be placed;
- Submit an acceptable method statement for the erection of the symbol;
- Provide and maintain appropriate fencing around the symbol for the duration of its display, if required for the safety of the public or to protect the symbol;
- Can demonstrate that they have suitable public indemnity insurance.

Religious symbols would only be permitted on the public highway where they would not adversely affect the passage or safety of other highway users. For the purpose of this policy, Christmas trees are considered a religious symbol.

27. Road Markings and Studs

Cambridgeshire County Council is responsible for the provision of road markings and studs on the road network throughout Cambridgeshire other than on motorways, trunk roads and private or non-adopted roads.

Road markings are as important as signs. The purpose of road markings and studs are to define traffic lanes, & alignment changes, provide warning, identify parking and waiting restrictions and to convey Give Way & other instructions to road users in a manner that is clearly visible both day and night.

This policy identifies the procedures and guidelines for the placement and maintenance of road markings and studs within the public highway and forms the

basis of the decision making process for the provision of all road markings and studs on the public highway.

Over the years there has been an inconsistent approach to the provision of road markings and studs across Cambridgeshire County. Therefore it is necessary to review existing road markings when undertaking resurfacing works and routine maintenance works to ensure that they are used in the most effective manner and applied consistently across Cambridgeshire in line with:

- The Traffic Signs Regulations and General Directions 2002 (TSRGD)
- Chapter 5 of the Traffic Signs Manual 2003 (TSM)
- Cambridgeshire County Council guidance
- Requirements BS EN 1436:2007 + A1:2008 Road marking materials – road marking performance for road users.

The over-use of road markings can diminish their effect on road users. This policy aims to rationalise their use and maximise their effectiveness, where they are necessary.

Standards & Guidelines for the provision & maintenance of road markings and studs
Proposals for road markings on the public highway must be approved by the scheme manager. Road markings or layouts that are not contained within the TSRGD 2002 are not permitted without prior approval from the Department for Transport (DfT) including any that are experimental and under trial.
Unless being provided as part of accident remedial work or as part of a speed management scheme, the following rules will apply to the provision of road markings:

Centre Lines
Centre line markings and centre warning line markings should not be provided on any carriageway of typically less than 5.5 metres total width.

Centre line markings must not be used on:

- unclassified roads
- estate roads
- residential cul-de-sac.

Centre warning line markings should only be used on

- unclassified roads
- estate roads
- residential cul-de-sac.

in conjunction with give way markings and at other significant hazards.

Centre warning line markings should only be provided on approach to a hazard. They must not be used in place of standard centre line markings between hazards.

Centre warning line markings should only to be provided as per DfT guidance:

- at significant bends/crests

- each side of junction centres or significant

Where parking bays are provided, centre line markings should be omitted where the remaining carriageway width is less than 5.5 metres.

Edge of Carriageway Markings
Edge of carriageway markings should generally only be used:

- in conjunction with centre warning line markings
- with double white line systems where no kerbing exists
- at sites where there is a persistent recorded problem with vehicles overrunning the highway verge.

Edge of carriageway markings shall only be provided on carriageways of typically less than 5.5 metres in width where it is not permissible to provide a centre warning line. For example: on bends, alongside deep drains or other hazards.

In locations where occasional short lengths of kerb exist, edge of carriageway markings should be continued through the kerbed length to maintain continuity.

Wherever used, edge of carriageway markings must be offset from the edge of the carriageway surface by 180mm to prevent their deterioration and facilitate future maintenance of the lines.

Give Way Markings
Give way markings will be laid at all junctions where no other marking is provided on:

- strategic routes
- main distributor roads
- local roads at their junctions with secondary distributors
- on any road if their use is recommended following an accident investigation study

Give way triangle markings will be laid:

- on the approach to strategic routes
- on main distributor roads
- in conjunction with give way signs
- at other locations where their use is recommended following an accident investigation study.

Give way markings should only be provided on estate roads in situations where the priority is not obvious or where there is recorded evidence of an accident problem.

Other Road Markings
Road markings such as (but not limited to) bus stops, ‘School Keep Clear’, ‘Keep Clear’, access protection markings, pedestrian crossings, disabled/parking bays and stop lines must be assessed for suitability by the Policy and Regulation team before replacement.

Longitudinal carriageway markings approaching traffic islands should be continued around and offset outside the island to provide adequate vehicle deflection.

Conservation Areas and Environmentally Sensitive Locations
Where used in conservation areas and other environmentally sensitive locations, yellow road markings for waiting restrictions should be 50mm in width and must be "primrose" yellow.

Other yellow waiting restriction markings should be in yellow material and be 50mm or 75mm in width. 100mm-wide markings should only be used on high speed roads (outside 40mph speed limits).

Studs
Under current regulations it is only a requirement for road studs to be used in conjunction with a solid double white line system.

Road Studs may be replaced on A roads except in street lit areas or inside 30mph limits. They may only be replaced on other roads in exceptional circumstances such as accident reduction schemes.

Long-type studs shall be used on principal roads with Halifax-type reflecting "cats eye pads".

All road studs within proximity of a level crossing MUST be stick-on type.

The use of 360 degree studs or solar powered studs shall only be considered where night-time accident rates are high and only after consultation with the Road Safety Engineering team.

Further Information
The table below specifies the road markings and studs requirements for each road type.

If clarification is required on any aspect of road markings or studs please contact the Network Management Team for guidance in the first instance.

Table A: General rules for road classifications

Classification	**Centre Line**	**Edge Line**	**Road Studs**
A	Yes, with warning lines where appropriate	Yes, on high speed sections except alongside kerbed sections and inside 30 mph speed limits.	Yes, except in street lit areas or inside 30mph limits.
B	Yes, where carriageway width typically exceeds 5.5 metres and with warning lines where	Only on consistently high traffic flow routes (typically >6000 vehicles in 12 hours) or at specific	No, except in conjunction with a double white line system or in exceptional

	appropriate.	hazard locations (eg: bends and alongside deep drains or where buildings abut the highway).	circumstances such as accident reduction schemes.
C	Only on consistently high traffic flow routes (typically >2000 vehicles in 12 hours) where carriageway width typically exceeds 5.5 metres. Warning lines at specific hazard locations (eg: junctions and bends).	Only at specific hazard locations (eg: bends and alongside deep drains or where buildings abut the highway).	No, except in conjunction with a double white line system or in exceptional circumstances such as accident reduction schemes.
U & Estate	No markings at all except warning lines at specific hazard locations (eg: junctions and bends).	No markings at all except at specific hazard locations (eg: alongside deep drains or where buildings abut the highway).	No, except in conjunction with a double white line system or in exceptional circumstances such as accident reduction schemes.

28. School Flashing Amber Lamps

Flashing amber lamp units are permitted at school sites where either the 85th%ile approach speed to the crossing point is in excess of 36mph or the advance visibility of the crossing point is less than 100 metres.

At sites which do not meet the speed or visibility criteria specified above the provision of flashing amber lamps will be permitted if the installation, operational and maintenance costs are met by a third party.

29. Speed Limits

Speed limits in settlements

This policy has been developed with reference to national policy issued by central government "Setting Local Speed Limits, Department for Transport Circular 01/2013"

The County Council will ensure that speed limits are introduced in a manner consistent with the current government guidance. Exceptions to usual practice will be subject to Committee approval.

The purpose of this policy is to explain the roles, responsibilities and the procedure that will be followed by Cambridgeshire County Council when deciding whether to change a speed limit.

Several factors are taken into account in the assessment of a road or area for a speed limit. These include:

- General character of the road or area
- Type and extent of roadside development
- Traffic composition
- Accident history
- Current traffic speed
- Enforcement
- The frequency of junctions
- Presence of amenities that attract pedestrians and cyclists
- Environmental impact such as increased journey times, vehicles emissions, andthe visual impact of the signing

The three national speed limits are:

- 30 mph speed limit on roads with street lighting (sometimes referred to as Restricted Roads)
- National speed limit of 60 mph on single carriageway roads
- National speed limit of 70 mph on dual carriageways and motorways.

These national speed limits are not, however, appropriate for all roads. The speed limit regime enables authorities like Cambridgeshire County Council to set local speed limits in situations where local needs and conditions suggest a need for a speed limit which is different from the national speed limit. For example while higher speed limits are appropriate for strategic roads between main towns, lower speed limits will usually apply within towns and villages. A limit of 20 mph may be appropriate in residential areas, busy shopping streets and near schools where the needs and safety of pedestrians and cyclists should have greater priority.

The speed limit regime enables traffic authorities to set local speed limits in situations where local needs and conditions suggest a speed limit which is different from the respective national speed limit.

30 mph Limits
The county council will work towards the introduction of a 30mph speed limit in the developed parts of all settlements in the County together with, where appropriate and affordable, complementary features to encourage drivers to travel at an appropriate speed.

Where mean speeds are in excess of 30mph, to initiate a lower speed restriction with simply a sign is unlikely to ensure conformity by the general motorist if the road and highway environment is not conducive and is likely to lead to unacceptable levels of requests for enforcement action on the part of Police officers. Current resourcing and ongoing operational commitments may not allow for specific, routine or targeted enforcement action to be undertaken. Consideration should therefore be given to the

introduction of complementary speed reduction features. Depending on the site, "soft" features such as gateways, red surfacing and roundels may be appropriate where mean speeds are 35mph or below and traditional traffic calming measures may be required to achieve compliance where speeds exceed 35mph.

20 mph Limits
(Dft circular 1/13 Setting Local Speed Limits – table 1)

Successful 20 mph zones and 20 mph speed limits are generally self-enforcing, i.e. the existing conditions of the road together with measures such as traffic calming or signing, publicity and information as part of the scheme, lead to a mean traffic speed compliant with the speed limit. Therefore 20mph speed limits may be permitted at sites:

- where the mean speed of traffic is 24mph or lower
- in combination with self-enforcing speed reduction features necessary to achieve a mean speed no greater than 24mph

Having reliable information about existing speeds is vital to help confirm that the speed limit is appropriate for the road, therefore 7 days data from an automatic traffic counting device should be provided. Surveys should be carried out during a 'neutral', or representative, month avoiding main and local holiday periods, local school holidays and half terms, and other abnormal traffic periods.

To achieve compliance there should be no expectation on the police to provide additional enforcement beyond their routine activity

20 mph zones must be introduced in clearly defined zones (e.g. between radial routes or a spine road with culs-de-sac) and not in isolated roads or culs-de-sac.

School time 20mph speed limits supported by interactive signs and "soft" traffic calming may be provided outside school sites where the existing mean speed does not exceed 30 mph. Where the existing mean speed exceeds 30 mph to initiate a lower speed restriction with simply a sign is unlikely to ensure conformity by the general motorist if the road and highway environment is not conducive and is likely to lead to unacceptable levels of requests for enforcement action on the part of Police officers. Current resourcing and ongoing operational commitments may not allow for specific, routine or targeted enforcement action to be undertaken. Consideration should therefore be given to the introduction of complementary speed reduction features. Depending on the site, traditional traffic calming measures may be required to achieve compliance.

Buffer speed limits of up to 400 metres in length, set at a minimum of 10 mph above the settlement speed limit will be permitted.

For speed limit purposes the following definitions will apply:

I. A settlement will be 'At least 20 properties fronting onto a length of public highway over a distance of at least 600m'

II. The extent of a settlement will be 'The point at which full frontage development begins', or 'at the first property fronting a road entering a settlement, on which there is at least 3 properties/100 metre length of road, prior to the point at which full frontage development begins'.

Decision Making

Implementing speed limits requires the making of a legal order, which involves a statutory consultation process that requires the Highway Authority to advertise, in the local press and on-street, a public notice stating the proposal and the reasons for it. The advert invites the public to formally support or object to the proposals in writing within a 21 day notice period. The County Council will also consult with the emergency services, (the Chief Officer of Police is a statutory consultee) the local County, District and Parish Councillors and any other persons most likely to be directly affected by the proposal.

Should any objections be received then the Council has a duty to consider the objection and a report would go before Members for a decision whether to uphold or overrule.

Police Support

Proposed speed limits should be supported by the Police. If the Police are not supportive communities must ensure that expectations over the likely level of compliance with the limit are managed.

Speed limits outside settlements

Typical characteristics for speed limits in rural areas outside settlements are shown in the table below:

Speed limit (Mph)	**Upper tier** (Roads with predominant traffic flow function)	**Lower tier** (Roads with important access and recreational function)
60	Recommended for most high quality strategic A and B roads with few bends, junctions or accesses	Recommended only for the best quality C and Unclassified roads with a mixed (i.e. partial traffic flow) function with few bends, junctions or accesses. In the longer term, these roads should be assessed against upper tier criteria.
50	Should be considered for lower quality A and B roads, which may have a relatively high number of bends, junctions or accesses. Can also be considered where mean speeds are below 50 mph, so lower limit does not interfere with traffic flow.	Should be considered for lower quality C and Unclassified roads with a mixed function where there are a relatively high number of bends, junctions or accesses

40	Should be considered where there is a high number of bends, junctions or accesses, substantial development, where there is a strong environmental or landscape reason, or where there are considerable numbers of vulnerable road users.	Should be considered for roads with a predominantly local, access or recreational function, or if it forms part of a recommended route for vulnerable road users.

Guidance in urban speed limit characteristics
A summary of typical urban characteristics and appropriate speed limits is shown in the table below.

Speed Limit (mph)	Characteristics
20	In town centres, residential areas and in the vicinity of schools and other premises where there is a high presence of vulnerable road users.
30	The standard limit in settlements that are fully developed.
40	Higher quality suburban roads or those on the outskirts of urban areas where there is little development and few vulnerable road users. Should have good width and layout, parking and waiting restrictions in operation and buildings set back from the road. Should wherever possible cater for the needs of non-motorised users through segregation of road space and have adequate footways and crossing places.
50	Usually most suited to special roads, dual carriageway ring or radial routes or bypasses which have become partially built up. Should be little or no roadside development.

To achieve average speeds appropriate to the typical speed limits given in the table above it may be necessary to introduce speed reduction measures.

Speed limits in new developments
All roads in areas of new development should be designed to physically restrict vehicle speeds to the appropriate maximum levels shown in the table above.

Manual for streets (the guide for the design, construction, adoption and maintenance of new residential streets) recommends 20 mph or less as the design speed for residential roads in new developments.

30. Stopping up of a Highway

When considering applications to stop up a highway or part of a highway the following conditions will be considered:

- That the highway is no longer necessary or;
- That the highway can be diverted so as to make it nearer or more appropriate for public need.

The applicant is expected to meet all the legal costs incurred in this process, regardless of whether the application for stopping up is approved by a Magistrates' Court and an engineering fee to cover the costs associated with technical vetting and Court attendance (see Highway Charges). Consultation will be undertaken with the relevant parish council and local county councillor.

31. Street Traders

A licence is required to become a street trader. Licences are issued by the local District or City Council.

32. Tables and Chairs

The Highways Act 1980 regulates tables and chairs permits. You will need a permit if you would like to place tables and chairs on the public highway.
You may also need to get planning permission. Contact your local Planning Department for more details.

For Highways Tables & Chairs Application Forms and Guidance Notes and terms and conditions, please visit our web site.

33. Temporary Road Closures

- Temporary road closure orders may be made to facilitate:
- Events taking place on the highway
- Highway works by a statutory undertaker / public utility
- Highway works by a third party to facilitate new development
- Improvement or maintenance of the highway network

Temporary road closures may not last for more than 18 months unless approval of the Secretary of State is granted.

Temporary closure orders for third parties and statutory undertakers / public utilities will be subject to a charge (see Highway Charges).

34. Tourist Signing

1. DEFINITION

1.1 A "tourist destination" is defined as a permanently established attraction which attracts or is used by visitors to an area and is open to the public without prior booking during its normal opening hours.

2. GENERAL POLICY

2.1 To ensure that tourist confidence is upheld in the white on brown system of direction signing to tourist attractions and facilities it is essential that a minimum level of quality is maintained and that the provision of tourist signing does not lead to a proliferation of direction signing to the detriment of road safety and the environment.

2.2 For these reasons the provision of tourist signing will only be considered:

- to permanently established sites which are open to visitors without prior booking for a minimum of 4 hours a day, 150 days per year
- to sites whose primary purpose is to provide an attraction or facility for tourists-tourist signing will not be permitted at locations where other directional signing (including private signing) exists, or is to be provided
- where their provision is considered essential to direct visitors to an attraction or facility-signs will not be approved at locations where their provision would be mainly for promotional or advertisement reasons
- for sites where other eligible establishments in the vicinity would not be compromised by their provision
- at locations where the effectiveness of existing traffic signs will not be adversely effected
- in areas where their provision will not detract from the visual environment.

3. TOURIST ATTRACTION REQUIREMENTS

3.1 Tourist attractions will generally include places of interest open to the public which attract visitors to the area and offer recreational, educational or historical interest. These include, for example, theme parks, historic houses, museums, zoos and leisure complexes.

3.2 In addition to the general conditions stated in paragraph 2.2, tourist attractions must also comply with all of the following conditions to qualify for the provision of tourist signing:

- The owners or management of the attraction must provide confirmation that they have registered with Visit England and have agreed to abide by its Code of Practice for Visitor Attractions (leisure destinations no not have to be and for reasons of their national interest English Heritage and National Trust properties are exempted from this requirement)
- The applicant must provide evidence that appropriate steps have been taken to publicise the attraction and to inform potential visitors of suitable approach routes
- There must be adequate on-site facilities for visitors, including parking, appropriate to the size of the site and the number of visitors which it is likely to attract.
- Where off-site parking is provided it must be within a safe reasonable walking distance of the attraction.
- If the off-site car park is not owned by the operator of the attraction, written confirmation that such use is acceptable must be provided.

3.3 Attractions will only be signed from the nearest A or B Class road or the nearest signed settlement. Those with direct access to such a road will not need signing if the entrance is visible and identifiable from a sufficient distance to enable safe vehicular movement at the access.

Signing from motorways and trunk roads will be considered in accordance with the Highways Agency's own criteria, and will be subject to their approval. Where an attraction meets these criteria, consideration should be given to signing from the nearest of these roads.

Signing to attractions in urban areas should be considered in conjunction with any signing to tourist facilities and should form part of a comprehensive scheme developed in conjunction with the local Council, Tourist Officer, business associations and other local representative bodies. Priority should be given to directing tourists to appropriate public car parks and to providing Tourist Information Centres (TICs) or Tourist Information Points (TIPs) within the car parks. Signing to attractions could then take the form of pedestrian signing.

Subject to road safety and traffic management considerations outlined in Section 7, as a general rule no more than six destinations (less on high speed roads), of which not more than four should be tourist destinations, should be included in any sign structure. It may be necessary to prioritise tourist destinations with primary and other local destinations, and where necessary, tourist destinations may be prioritised on the basis of visitor numbers or closeness to the initial signing.

Directional signing to the attraction must satisfy the environmental requirements listed in Section 6. To reduce environmental impact, where an attraction requires signing through more than two junctions, consideration should be given to providing signs of the "For X, follow Y" type, utilizing where possible existing signing legends rather than providing additional continuity signing.

4. ASSESSMENT OF TOURIST FACILITIES

4.1 The provision of signing to tourist facilities will only be considered where it can be shown that they will be of benefit to tourists who require serviced accommodation, refreshment, shopping, leisure facilities etc. The numbers and level of provision of tourist facilities vary across the County and between urban and rural locations. Clearly, it would be impracticable to sign every facility.

4.2 To avoid a proliferation of signing, basic conditions have been developed which apply to all facilities and more specific conditions for each type of facility.

Basic conditions

4.3 In addition to the general conditions stated in paragraph 2.2 tourist facilities must also comply with all of the following basic conditions to qualify for the provision of tourist signing:

- The owners or management of the facility must provide confirmation that they have been operating for at least 12months.
- The facility must meet the standards required by professional or regulatory organisations appropriate to the facility and its conduct of business and operation
- The applicant must provide evidence that appropriate steps have been taken to publicise the facility and to inform potential visitors of suitable approach routes.
- There must be adequate on-site facilities for visitors, including parking, appropriate to the size of the site and the number of visitors which it is likely to attract. Where off-site parking is provided it must be within a safe reasonable walking distance of the facility. If the off-site car park is not owned by the operator of the facility, written confirmation that such use is acceptable must be provided.

In addition to these basic conditions establishments will also need to satisfy the more specific conditions for the various types of facility listed below.

Accommodation

4.4 The provision of tourist facility signing for the following types of accommodation will be restricted in both rural and urban areas to premises whose primary function is providing accommodation.

4.5 Hotels and Bed and Breakfast establishments must be members of a quality assurance scheme which requires independent inspection of all member premises and which are more than just marketing schemes. Those operated by the ETB, AA or the RAC are suitable.

4.6 Camping and Caravan sites retain their eligibility for tourist signing from the 1991 regulations. To qualify for signs a site must be licensed under the Caravan Sites and Control of Development Act 1960 and/or the Public Health Act 1936 and have a minimum of 20 pitches for casual overnight use. They should also be members of the British Graded Holiday Parks Scheme ("Q" scheme) or alternatively be registered with the ETB.

4.7 Youth Hostels also retain their eligibility for tourist signing under the 1991 regulations and all Hostels managed by the Youth Hostels Association may be provided with tourist signing.

4.8 Self-catering accommodation tends to be pre-booked, with visitors receiving directions to the premises. In this situation it should not be necessary to consider such facilities for tourist signing. If evidence can be produced that self-catering accommodation is available without pre-booking and the ETB quality standard for this type of accommodation is met then the provision of tourist signing could be considered.

Refreshment

4.9 Tourist facility signing will only be considered for establishments whose primary function is to provide refreshments for visitors to the area. This group of facilities will include restaurants, cafes and public houses, which provide food but will exclude premises whose primary function is the sale of alcoholic drinks.

4.10 Many premises provide refreshments and it would clearly be unacceptable to provide tourist signing to all such facilities. To do so would lead to a proliferation of signs which in many cases would be directing visitors away from equally suitable establishments. For these reasons only isolated or remote refreshment establishments and those which are promoted as tourist attractions will be considered for signing.

4.11 Similarly, it is proposed that there should be no tourist signing of refreshment facilities in urban areas. In these areas it is recommended that there should be greater use and signing of TICs and TIPs. In the market towns TIPs should be located in the town centre public car parks and should contain information on the attractions and facilities available. The information displayed will be a matter for the District Authorities to agree with the appropriate bodies representing the various tourist facilities and attractions involved.

4.12 In rural areas tourist signing to refreshment facilities will only be considered where:

- The facility is not located on a Class A or B Road or on a main thoroughfare. Establishments in bypassed communities will be considered under the special conditions which relate to this situation and are described in paragraph 5.2
- There are no similar facilities within one mile
- The facility must comply with all relevant Environmental Health, Planning and other legislation
- The facility must have a minimum of 20 seats available for dining and should serve hot meals at lunch times and in the evening without pre-booking.

Shopping

4.13 Conventional local direction signing is already available for directing visitors to town centres, superstores etc. and this should continue to be used. Only shops which have special features specifically for tourists will be considered for signing in urban areas. The use of TICs and TIPs is considered to be most appropriate for this type of signing.

4.14 In remote areas the signing of village stores will be permissible but only in locations where their presence would not otherwise be apparent.

4.15 Garden centres which are able to demonstrate that they promote themselves to the tourist market may be considered for signing.

4.16 Generally, shopping facilities will be signed by their generic names i.e. village store, craft centre, garden centre etc. Individual naming of facilities will only be considered to prevent possible confusion between similar facilities.

Leisure

4.17 Leisure facilities will include recreational facilities, sports venues, cinemas and leisure centres etc. Tourist signing will be considered if the following requirements are met:

- Theatres, cinemas and music venues must have a minimum of 50 seats
- Sporting venues must demonstrate a regional or national significance, holding regular fixtures with suitable visitor facilities.

Implementation Guidelines

4.18 Facilities will only be signed from the nearest A or B Class road. Those with direct access to such a road will not need signing if the entrance is visible and identifiable from a sufficient distance to enable safe vehicular movement at the site.

4.19 Signing from motorways and trunk roads will be considered in accordance with the Highways Agency's own criteria, and will be subject to their approval. Where a facility meets the criteria, consideration should be given to signing from the nearest of these roads.

4.20 Signing to facilities in urban areas should be considered in conjunction with any signing to tourist attractions and should form part of a comprehensive scheme developed in conjunction with the local Council, Tourist Officer, business associations and other local representative bodies. Priority should be given to directing tourists to appropriate public car parks and to providing TICs or TIPs within the car parks. Signing to facilities could then take the form of pedestrian signing.

4.21 Subject to the road safety and traffic management considerations outlined in Section 7, as a general rule no more than six destinations (less on high speed roads), of which not more than four should be tourist destinations, should be included in any sign structure. It may be necessary to prioritise tourist destinations with primary and other local destinations, and where necessary, tourist destinations may be prioritised on the basis of visitor numbers or closeness to the initial signing.

4.22 Directional signing to the facility must satisfy the environmental requirements listed in Section 6.

4.23 To reduce environmental impact, where a facility requires signing through more than two junctions, consideration should be given to providing signs of the " For X, follow Y" type, utilising where possible existing signing legends rather than providing additional continuity signing.

4.24 The general requirement to admit the public without prior booking will preclude the signing of facilities that are primarily membership organisations (e.g. golf clubs).

4.25 Where there are two or more facilities of the same type either in an area, or along a particular route, then generic legends rather than individual ones should be used.

5. POLICY FOR BYPASSED COMMUNITIES

5.1 The presence of "local services" in by-passed villages or small towns can now be signed using the "white on brown" tourist signs. The sign can include a short descriptive phrase, such as "Historic market town". Generic names and/or symbols can be used to indicate the facilities/attractions available (i.e. Hotels/bed symbol; restaurants/knife and fork symbol, etc).

It is reasonable to expect larger towns to provide the full range of visitor facilities and therefore, it is proposed that only settlements of 10,000 population or less which are also within 3 miles of a main road will be considered for this type of signing.

6. ENVIRONMENTAL CONSIDERATIONS

6.1 Many tourist attractions and facilities are located in environmentally sensitive areas quality of the surroundings. A proliferation of signing in these areas would be counter-productive to the very reason for tourists visiting the area.

6.2 Details of tourist facilities should be provided at TICs and TIPs for which signing using the "***i***" symbol will be permitted.

6.3 In conservation areas tourist attractions may be signed but signing to tourist facilities will not be permitted. A boundary sign may be allowed at the edge of the village or town to identify the available tourist facilities. Within conservation areas signing to tourist attractions will be considered but will be subject to the approval of the Director of Environment and Regulation and the appropriate District Council Planning Officer.

7. ROAD SAFETY AND TRAFFIC MANAGEMENT ISSUES

7.1 Signs will be provided in accordance with the Traffic Signs Regulations and General Directions 2002 and all subsequent amendments and shall be manufactured in accordance with BS 873.

7.2 The number and size of signs required will depend on the road system and traffic flows and speeds. Sign design will be in accordance with good traffic management practice and will be to the satisfaction of the Director of Highways and Access.

7.3 If tourist signing is refused on road safety grounds, the applicant will be clearly informed of the dangers which necessitated refusal.

8. APPLICATION PROCEDURE AND PAYMENT FOR SIGNS

8.1 All tourist signing costs should be borne by the applicant. This includes design, administration, manufacture, installation and ultimately maintenance.

8.2 On receipt of an initial enquiry applicants will be supplied with a self-assessment form (see below) and an application form. These will facilitate an initial self-assessment of their eligibility for tourism signing and if this appears favourable to make a full application. The form will also state the conditions relating to the provision and costs of signing and when completed and returned to the Highways and Access Directorate, with the completed application form and initial administration fee will instigate the detailed assessment of eligibility and entitlement.

8.3 The following costs will be borne by the applicant:

i. Administration and site feasibility fee -if the applicant decides to make a formal application for tourist signing he/she will be asked to provide a nonreturnable fee of £200.00 and to sign a form of agreement which sets out the pricing mechanism and their legal obligation. The fee will cover the administration time in checking eligibility, assessing entitlement, copying applications for consultation, staff time and travelling costs in carrying out the assessment of sign locations and all associated correspondence.

ii. Design and post erection inspection fee -the full cost of these works will be charged.

8.4 The applicant will be expected to pay all fees in advance. The signs will be procured under the third party funding policy for highway features with the applicant meeting all works costs and a commuted sum for the maintenance of the signs during their design life. The cost of replacing signs as a result of damage vandalism or theft or at the end of their design life must be met by the applicant.

8.5 The County Council reserves the right to remove signs, should an attraction or facility cease to meet the relevant criteria, and to charge the operator of the attraction for the cost of this work. It may also prove necessary to relocate signs for road safety or traffic management reasons but such works would be carried out at the County Council's expense.

8.6 Where there is more than one destination on any sign the cost of that sign will be borne equally by the applicants.

9. ELIGIBILITY

9.1 To be eligible for consideration for the provision of tourist signing operators must be able to answer “yes” to all of the questions below.

ELIGIBILITY AND CONDITIONS SELF ASSESSMENT FORM

1 Does your business benefit from tourism?
2 Has it been operating from a permanent site for 12 months?
3 Does it fulfil an identified tourist need?
4 Do visitors need directions other than normal road signs to find your establishment?
5 Is it open to the public without prior booking?
6 Are you prepared to pay all reasonable costs for signing if your application is successful?
7 Do you accept that any agreed signing can be removed at your cost if your facilities fail to maintain relevant criteria or move location?
8 If your application is successful will you remove any off site advertisement signing which you may have on or adjacent to the public highway?

Notes

i. The administration and site visit fee is payable at the time of application in accordance with the approved schedule of highway charges and fees.
ii. There are additional costs for design fees, safety audit of sign schemes designed by other than Cambridgeshire County Council, construction and erection.
iii. Traffic management, road safety, local amenity, quality of attraction and standard of service all have to be taken into account and could, without prejudice, form the basis for rejection of your application.
iv. The design, maximum number and locations of signs are determined by Cambridgeshire County Council and may be altered upon review of traffic management, safety or amenity needs.
v. Applicants should not expect signing from all possible directions.
vi. All signs become and remain the property of Cambridgeshire County Council.

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35. Traffic Calming

Traffic calming schemes may consist of a combination of various traffic calming features, designed to reduce and manage the speed of vehicles and improve road safety. The design of schemes should accord with current Department for Transport standards and take into account all relevant guidance and advice.

36. Traffic Regulation Orders

Traffic regulation orders must comply with County Council policies subject to Elected Member decision via the Committee process.

The process for introducing traffic regulation orders shall be in accordance with the current Government procedure regulations.

The informal consultation process will identify who is likely to be affected by a proposal and we will ask those individuals/groups to provide feedback on draft plans.

We may use this process to help shape the proposal that will later go out for formal consultation.

The formal advertisement of a draft traffic regulation order will be undertaken by the Policy and Regulation Team.

37. Traffic Signals

Traffic signals may be provided to:

- reduce accidents;
- improve conditions for pedestrians (in particular vulnerable users), cyclists and public transport;
- balance conflicting access demands;
- manage vehicle flow.

New installations will be designed in accordance with current relevant standards, taking into account all relevant guidance. New installations shall incorporate pedestrian and cycle facilities as far as is reasonably practicable.

38. Traffic Signs

All directional, warning and information traffic signs will be designed in accordance with the current Traffic Signs Regulations and General Directions (TSRDG) and other national guidelines issued by the Department for Transport. The use of non-prescribed signs must be authorised by the Department for Transport.

New or replacement sign posts on roads with speed limits of 50 mph or higher shall comply with the requirements for road restraint systems as set out in the Design Manual for Roads and Bridges.

Passively safe street furniture will not be considered on roads with speed limits of 30 mph or less due to the possibility of frangible posts hitting pedestrians or causing other secondary accidents. The need for passive street furniture on roads with speed limits between 40 mph and 50 mph will be risk assessed as part of the road safety audit process.

39. Tree Policy

Scope

This document sets out Cambridgeshire County Council's approach to preserving and enhancing the tree stock across Cambridgeshire's highway network. The approach outlined below is very much a partnership effort, with the County Council working closely with Members, District and Parish councils, local organisations, communities and individuals.

Asset Management

This document forms part of the Highways Infrastructure Asset Management Plan (HIAMP), which details the County Council's approach to improving, managing, operating and maintaining its assets on the public highway and rights of way network.

Responsibility

- There are over 87,000 highway trees in the County and many more privately owned trees adjacent to the highway.
- Trees situated within the boundary of the public highway are generally the responsibility of the Highway Authority (Cambridgeshire County Council).
- Highways England is responsible for trees along motorways and trunk roads.
- Trees on private land are the responsibility of the land owner or occupier.
- Trees in hedges and boundaries are usually the responsibility of the land owner/occupier whose property abounds the highway.
- Trees on private property adjoining the highway are the responsibility of the owner/occupier, but the Highway Authority has a duty to ensure that such trees do not endanger the Highway or its users and statutory powers to discharge the duty.
- The responsibility for cutting back trees and other vegetation that overhangs the public highway from neighbouring land rests with the owners or occupiers of the land on which the trees or vegetation grow. The Highway Authority can enforce such actions, using its statutory powers, if the overhang is deemed a danger or nuisance.
- Cambridge City Council currently manages the tree stock within Cambridge City on behalf of Cambridgeshire County Council. There are some 10,400 street trees within Cambridge City.

Routine Tree Work

The County Council will cut back all hedges, trees and shrubs that are the responsibility of the Highway Authority to ensure appropriate visibility and sight lines and that road signs are not obscured. All cutting shall be undertaken in the late autumn or winter to accord with the Wildlife & Countryside Act 1981 and will be carried out to recognised arboriculture standards. Where an obstruction to a sight line, street light, road sign etc. or a potential hazard has been identified these shall be prioritised to allow works to be undertaken as part of the cyclic maintenance programme.

The local member/s of the County Council and the relevant District, Parish, Town or City Council will be informed of any works due to be carried out, a minimum of two weeks prior to the work being undertaken. In the case of emergency work the relevant local members will be updated once the work has been completed, should it not be practical to do so before dealing with the emergency.

Trees Encroaching on Public Highway

Trees and vegetation that overhang the highway should be crown-lifted to at least 5.2m to allow safe passage of high sided vehicles as well as being cut back sufficiently from the edge of the carriageway to allow clearance for wing mirrors.

Trees and vegetation that overhang footways and footpaths should be crown-lifted to at least 2.5m and cut back to ensure that the footpath/way is at least 1.2m in width or to recover the full width. This is to allow safe passage for all footpath/way users including wheelchairs and mobility scooters.

For obscured road signs, the area cut shall be from the edge of the carriageway to the signpost furthest from the carriageway tapering to the edge of the carriageway at

a distance of 150 m on ‘A’ and ‘B’ class roads and 75m on all other roads, so that the sign is visible to the road user.

These heights have been selected as an acceptable standard and any vegetation below this may be deemed to be an obstruction. We may enforce Section 152 of the Highways Act (1980) which allows us to serve notice upon the owner of the trees/ vegetation informing them that they need to clear any obstructions safely.

When considering works to trees close to the highway, it is important to remember that wet, leaf laden branches may droop up to a metre lower than in their leafless, winter state.

Hedge Maintenance

Hedges should be trimmed as appropriate for highway safety or as part of their regular maintenance. They should be cut or laid, never flailed, unless they have been managed in this manner for five years or more. The cuttings should be swept up from carriageways and footways where they may cause punctures.

Trimming hedges during the bird nesting season should be avoided unless hedges are preventing the passage, or affecting the safety of the highway user, including cyclists and pedestrians.

The most active period of bird nesting season is from 1st March to 31st July but can extend from February to August so it is important to check that there are no active nests before trimming. Birds and their nests are protected by law. More information on this can be obtained from Natural England.

Replacement Trees

Trees that have to be removed from the highway or pathway will be replaced if the Council budget is available. Where no budget is available, the Council will contact the local Parish, City or District Council to see if they or local residents would like to pay for the planting of a replacement tree. The local County Council Member will also be informed about the tree removal and opportunity for a replacement.

Planting New Trees

The Council is happy to license new planting on the public highway where it is considered feasible and appropriate, via a risk assessment and safety check sheet. We will work closely with District, Town and Parish Councils, local organisations and individuals who may wish to plant trees in the public highway subject to good arboriculture practice, with cases assessed on a site by site basis.

Householders can apply to plant and maintain trees on the highway verge in front of their house only. This is done under Section 142 of the Highways Act. Support regarding an application will be provided by the Highway Authority, including specific guidance on species, location and suitability.

If you are a District, Town or Parish Council we will consider granting an agreement under Section 96 of the Highways Act to plant and maintain trees in your town or parish (please see our page on planting on the public highway). We will need to be

satisfied that the trees are suitable now and in the long term, taking into account safety, existing features, utility apparatus, water extraction, tree canopy and future maintenance implications. Commuted sums should be in place before a new tree is adopted in respect of the ongoing tree and landscape maintenance, but the County Council will help seek alternative sources of funding for tree planting, as well as commuted sums from others, (e.g. Parish Councils), for those who wish to plant trees on highways.

Good arboriculture practice must support any new planting proposal on new developments or existing adopted public highway. The 2014 Trees & Design Action Group guide "Trees in Hard Landscapes a Guide for Delivery" which considers technical design solutions and methods for tree planting in roadway verges and hard landscape areas is a useful document to promote good practice.

Planting will be approved either by Agreement (Highways Act 1980 - Section 96) or by Licence (Highways Act 1980 - Section 142), or by commuted sum. Depending on the type of agreement, ownership and maintenance of the planting will transfer to the County, District, Town or Parish Council (Section 96) or the frontage (Section 142) owner who will be responsible for maintenance.

Privately Funded / Third Party Trees

Parish Planting Schemes and/or privately funded new or replacement trees are welcomed and encouraged, and the County Council is keen to work with organisations / individuals that wish to fund replacement / new trees on the public highway.

Considerations for those wishing to privately fund trees:

- The type and siting of the planting does not differ from the approved scheme without written consent of the Highway Authority;
- The Council encourages a minimum of three metres planting distance from the road edge. However, some roadside verges may accommodate trees closer to the road edge than this, and the Council is pleased to consider site specific assessments on a case by case basis.
- For new trees, the party carrying out the planting consults with all affected utility companies, and pays for any alterations or damage caused during planting;
- For new trees the party carrying out the planting consults adjoining landowner(s), local Parish, Town or City Council, concerning the proposals and resolves any dispute or objection to the scheme;
- For new trees copies of the correspondence with utility companies and adjoining landowners are provided to Cambridgeshire County Council along with the proposal.

Insurance Claims and Subsidence Caused by Trees

There has been much discussion concerning subsidence of structures allegedly caused by street trees. Subsidence may be the result of many things such as a general reduction of ground water levels, inadequately designed or constructed foundations or seasonal variations in the moisture content of soils. Consequently we

will not automatically agree to remove trees where there is evidence of building subsidence and property owners should seek professional advice.

It is up to the owner of the property to prove that the tree(s) is (are) causing the damage. This is normally done by submitting a full arboriculture report from a structural engineer and/or a chartered surveyor and a professionally qualified arboriculturalist (with 12 months of crack monitoring data attached, soil analysis and other supporting evidence) from your insurance company.

The Council will carefully consider any relevant claims for subsidence damage but does not accept as a matter of course nearby highway trees are likely to cause or contribute to a subsidence problem. Early investigations are recommended as early action can limit the potential for damage.

Subsidence claims related to highway trees are administered by the Council Insurance Team. The claimant must provide positive evidence to demonstrate that the highway trees have caused the subsidence. Where appropriate the Council will obtain an independent third party opinion. The following information is required:

- Plan showing the location of the property and trees
- Age of property
- Depth and type of foundation
- Details of relevant property extensions
- Drainage details and location of other services
- Extent of damage
- Tree root data
- Soil and subsoil analysis
- Seasonal movement monitoring level distortion survey

Summary
The Highway Authority recognises that trees on the highway form an important part of the natural landscape providing aesthetic, ecological and environmental benefits. To that end we are keen to support and encourage local communities that wish to plant trees in their area. In the first instance please contact the Local Highway Officer for your area.

40. Vehicle Activated Signs (VAS)

It is recommended that VAS are only deployed if it is clear that the problem cannot be remedied by changing the environment, therefore VAS will only be permitted at accident cluster sites where there is a record of personal injury accidents for which excessive speed is considered to be a contributory factor and engineering measures have not resolved the problem.

The trigger speed for sites is an 85th percentile speed above ACPO limits(Association of Chief Policy Officers), i.e. 15% of drivers would be exceeding ACPO levels (= speed limit +10% +2mph). Without a recognised speed problem there is little benefit in reinforcing the speed limit.

Where a VAS is installed on the highway the sponsor must also provide funding for a commuted sum to cover its future maintenance, usually we limit this to 25 years.

If a VAS sign is adopted by the Highway Authority it will be maintained throughout its working life. Replacement due to failure and not being economical to repair will need to be third party funded.

To reduce the funds required by communities we are promoting in place of main operated units, the use of Moveable Vehicle Activated Signs or Speed Indicator Deviceswhich removes the need for solar panels or expensive mains power supplies. The sponsor would need to recharge the battery and may need to pay the manufacturer a small annual service charge. These signs are cheaper than the traditional ones and we currently do not require a commuted sum to be paid.

Moveable Vehicle Activated Signs (MVAS)

MVAS are temporary and will not be in operation at any one site for more than one month.

MVAS sites will be determined by the Local Highway Authority after consideration of the following factors:

- The criteria for a VAS are not met
- Evidence of inappropriate speed
- Evidence of Parish/Town/City Council support for public concern over vehicle speeds and willingness to operate a volunteer MVAS relocation scheme

Speed Indicator Devices (SIDs)

SIDs are temporary and will not be in operation at any one site for more than one month.

SIDs sites will be determined by the Local Highway Authority after consideration of the following factors:

- The criteria for a VAS are not met
- Evidence of inappropriate speed
- Evidence of Parish/Town/City Council support for public concern over vehicle speeds and willingness to operate a volunteer SID relocation scheme

41. Vehicle Access

A dropped kerb may be used to provide access for vehicles to a property. If you would like a dropped kerb for vehicle access you need to put in an application to the County Council and if successful, arrange and pay for the construction.

To make an application (charges current for 2015/16 and subject to annual review):

- contact your local planning authority;
- gain planning permission or a written statement that you do not need planning permission;

- call 0345 045 5212 and apply for a dropped crossing. Please note that a fee of £180.00 is payable at this point;
- if your application is approved you will need to employ a contractor to carry out the work. If your application is not approved you will receive a refund of £110.00;
- complete a booking road space form

42. Vehicles for Sale on the Highway

Vehicles offered for sale on the public highway should be reported to the District Council for enforcement under the Neighbourhoods and Environment Act.

43. Highway Enforcement

General
In the most serious cases the County Council will consider the use of enforcement powers. Any action that is taken will have been carefully considered and will be in line with the Council's Enforcement Policies. The Enforcement Policies can be viewed on our website

The County Council's Enforcement Policies comply with the requirements of the following and should be read in conjunction with them:

- Regulators Compliance Code
- Code for Crown Prosecutor
- Enforcement Concordat
- The Guidance Manual for the Cambridge Parking Scheme
- Street works Enforcement - Refer to national legislation

Areas for Enforcement
The County Council's powers of highway enforcement would be exercised should the following items be found not to be compliant with the policy.

- A Boards
- Abandoned vehicles on the Highway
- Banners on the Highway
- Bollards and Marker Posts
- Depositing materials on the highway
- Encroachments and Obstructions
- Horses on the Highway
- Kerbing
- Mirrors on the Highway
- Mud on the Highway
- Religious symbols on the Highway
- Street Traders
- Tables and Chairs
- Vehicular Access
- Vehicles for sale on the highway

Specific guidance is shown below (items 4 and 5 – in relation to unauthorised encampments and signs)

Unauthorised Encampments

Where an unauthorised encampment is situated on the public highway, including a Public Right of Way, the Asset Manager will liaise with and support theTravellers Liaison Officer in confirming that the encampment is on highway land andwhether any action should be taken to achieve the removal of the encampment off thepublic highway.

Any decision to instruct Legal Services to serve notice on the travellers and to seek anappropriate court order will be made by the relevant Head of Local Infrastructure & Street Management inconsultation with the Travellers Liaison Officer in accordance with the CountyCouncil's policy.

Unauthorised Signs

Advertising signs are not permitted on the highway. Highway Officers will take action when unauthorised signs along a road become a problem or in response to a complaint from a parish or town council or from other elected representatives.

Signs or 'A-boards' which interfere with the safe movement of road users will be removed without notice and stored for not less than four weeks. The owner may collect the sign(s) on payment of a fee. The signs will be disposed of if not collected after four weeks.

Appendix VI

Life Cycle Plans – Carriageway

Fig. 1 – A class roads

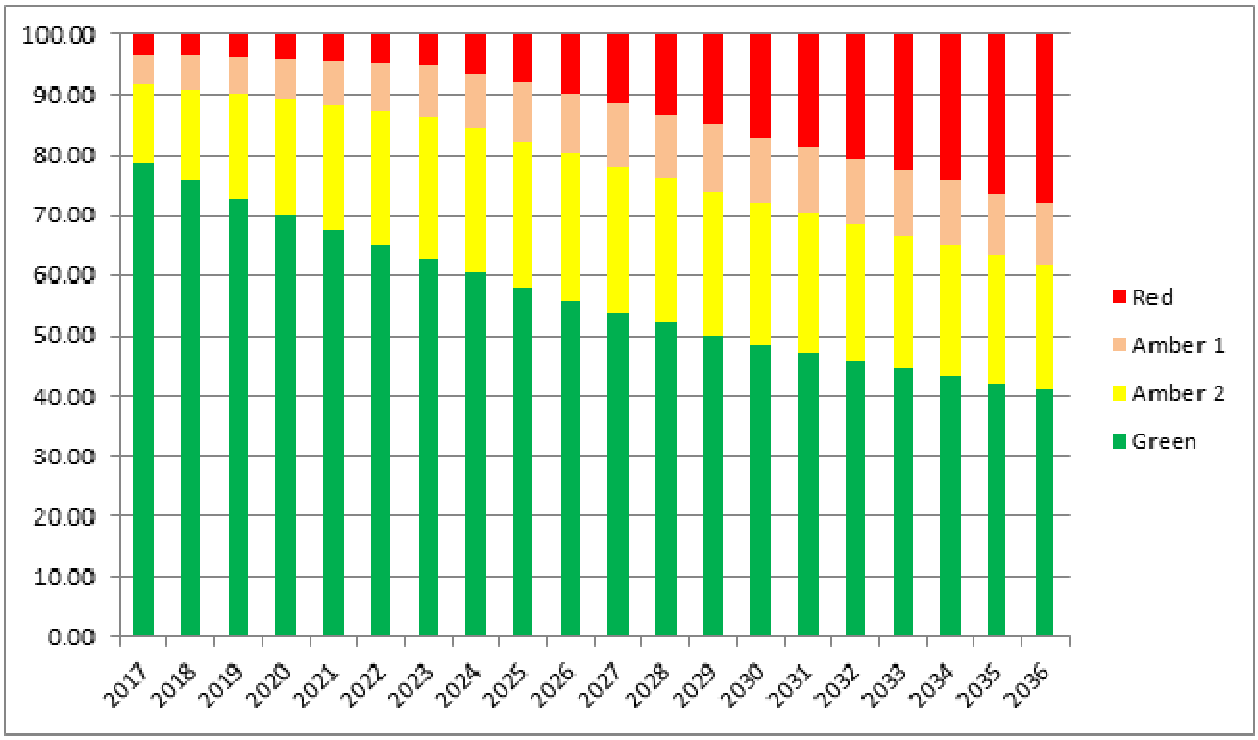


Fig. 2 – B class roads

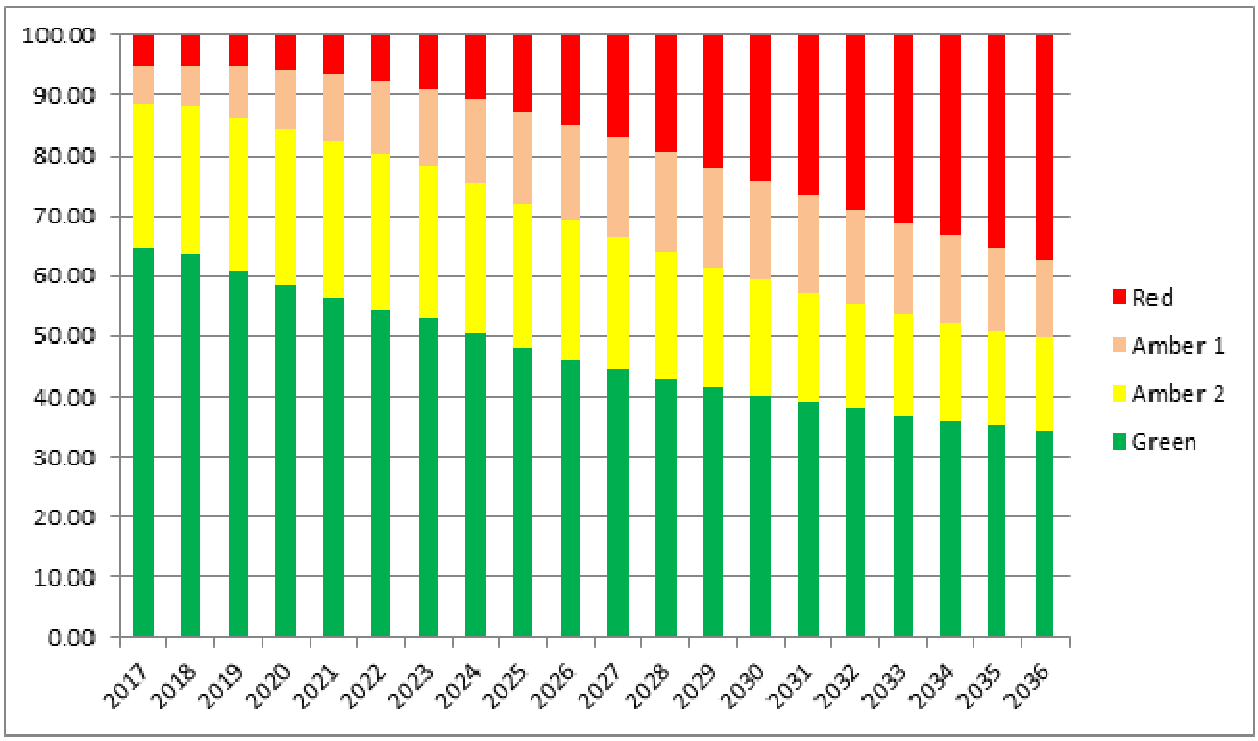


Fig.3 – C class roads

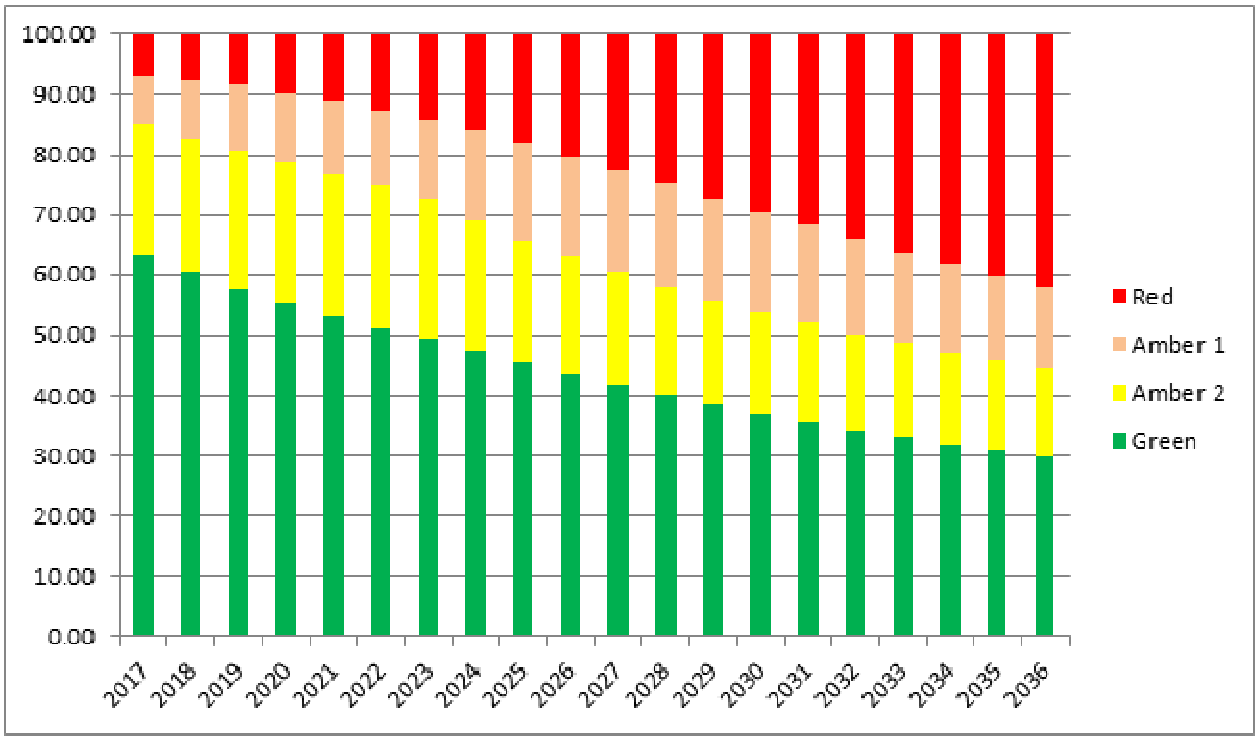
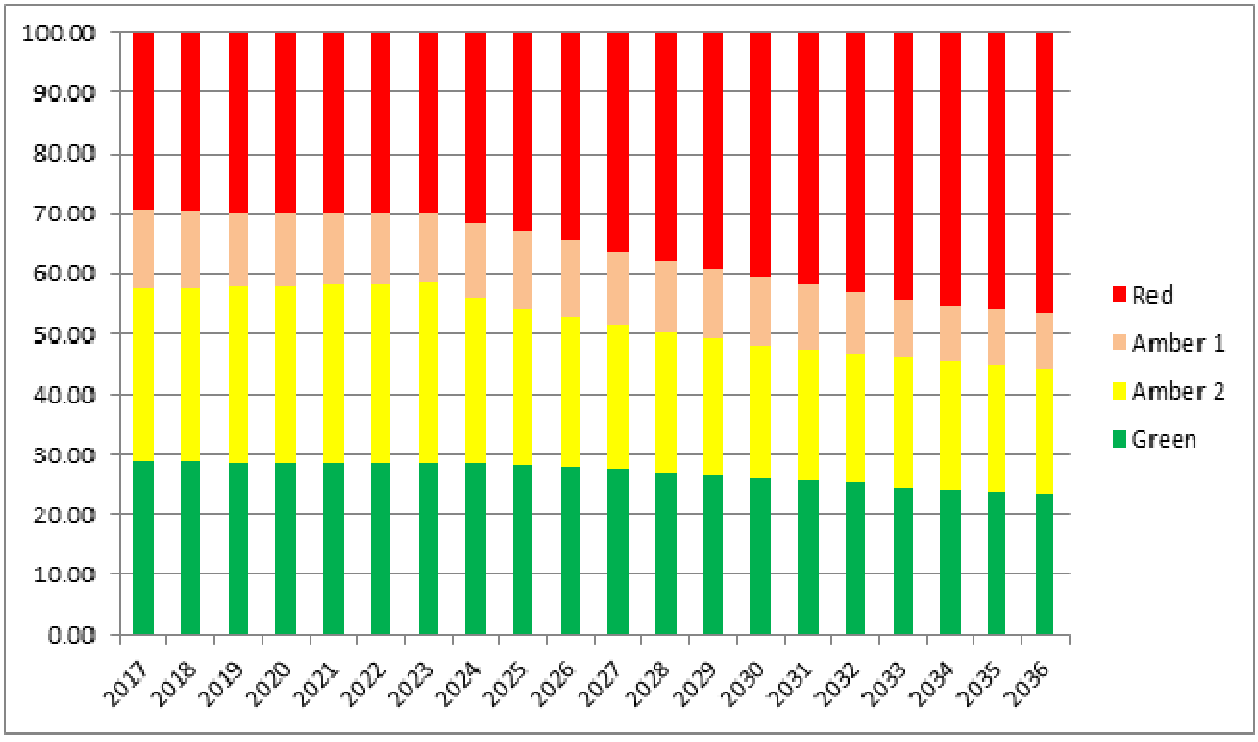


Fig .4 – Unclassified roads



Appendix VII

Skid Resistance Policy

The maintenance of adequate levels of skidding resistance on carriageways is a most important aspect of highway maintenance, and one that contributes significantly to network safety, particularly for riders of motorcycles. However, whilst the frequency of accidents is expected to increase as skidding resistance falls, the effect will be more pronounced for more 'difficult' sites and there is no skidding resistance boundary at which a surfacing passes from being 'safe' to 'dangerous'. Difficult sites are those where the geometry, for example, bends, junctions, steep gradients, pedestrian crossings and traffic signals increase the risks of skidding accidents.

Skid resistance network

The network to which this policy applies is based upon Cambridgeshire's maintenance hierarchy and incorporates Strategic Routes and Main Distributor Roads. A review of the maintenance hierarchy will be carried out periodically to ensure any changes to the road network or its usage are reflected and incorporated into this policy.

A list of roads that are routinely tested and for which this Skid Resistance Policy is applicable is given as Annex A.

Test Equipment

The test equipment to be used for routine skid resistance testing is SCRIM (Sideways Force Co-efficient Routine Investigation Machine). This complies with the national standard for skid resistance and is the preferred method for calculating the Characteristic SCRIM Co-efficient (CSC).

The network shall be tested on an annual basis, with 100% of the network to which this policy applies tested in both directions.

Setting Investigatory Levels

The initial investigatory Level (IL) is based upon various factors including road type, alignment or feature. HD28/15 Table 4.1 contains nationally defined IL categories, descriptions and values, for trunk roads and motorways. It is noted that HD 28/15 states that it "is not intended for the management of skid resistance on local roads, similar principles may be applicable". The table is reproduced below.

Site Category and Definition		Investigatory Level at 50km/h					
		0.30	0.35	0.40	0.45	0.50	0.55
A	Motorway						
B	Dual carriageway non-event						
C	Single carriageway non-event						
Q	Approaches to and across minor and major junctions, approaches to roundabouts						

K	Approaches to pedestrian crossings and other high risk situations						
R	Roundabout						
G1	Gradient 5-10% longer than 50m						
G2	Gradient >10% longer than 50m						
S1	Bend radius <500m – dual carriageway						
S2	Bend radius <500m – single carriageway						

- The dark shading indicates the range of IL that will generally be used for trunk roads carrying significant traffic levels
- The light shading indicates a lower IL that will be appropriate in low risk situations, such as low traffic levels or where the risks present are well mitigated and a low incidence of accidents has been observed
- Exceptionally, a higher or lower IL may be assigned if justified by the observed accident record and local risk assessment

Cambridgeshire County Council has set appropriate IL's for its network, based upon the table above, amended to reflect lower traffic levels. These are reviewed on a 3 year rolling programme, by a detailed site specific risk assessment. This assessment is to be undertaken by competent officer. The annual IL review programme is detailed in Annex B.

In addition, a review of the IL shall be carried out whenever there is a significant change to the network, such as the installation of a pedestrian crossing or roundabout. This review shall be carried out annually to incorporate any new installations/changes that are delivered through the authority's Transport Delivery Plan, and to capture any changes due to private development of which the Authority is aware.

Roads within any site category with no exceptional risk of skidding accidents will be assigned the lowest IL.

Cambridgeshire County Council bases its approach to setting ILs on Table 4.1 from HD28/15. Where the table permits lower values (light shading), the Authority will consider adopting these values.

Detailed Site Specific Risk Assessments and Site investigation

When routine SCRIM testing has been carried out, results are analysed to determine if there are any sites that are at or below the Investigation Level.

Where any site is at or below the IL, an investigation is undertaken to establish whether the site in question has a wet skidding accident skidding history. Those sites showing a correlation of wet skidding injury accident history and skidding resistance at or below IL are then subject to further investigation, leading to a prioritised list of sites for treatment.

Sites that have had one or more wet skidding injury accidents during the 3 year period prior to the SCRIM survey are deemed to have a wet skidding accident history.

Method of Prioritisation of Sites

Those sites that have skidding resistance considerably less than IL and also have a wet skidding injury accident history will be prioritised for further site investigation by the Authority's road safety team and probable treatment. Typically such sites will be 0.25 or more below IL.

All sites 0.10 or more below IL but less than 0.25 below IL that also have a wet skidding injury accident history will be assessed by the Authority's road safety team for possible site investigation and treatment.

Those sites less than 0.10 below IL will only be prioritised for treatment where there is a wet skidding injury accident history combined with poor texture depth and there are clear indications that improving the condition of the surfacing is likely to significantly reduce the risks of injury accidents occurring.

Accident histories will be assessed based upon the number of wet skidding injury accidents over the 3 year period prior to the SCRIM survey being undertaken.

Site Investigations

Individual site investigations shall be completed and documented.

The results of the site investigation will determine whether or not there is justification for treatment, or whether other action may be more appropriate. Surface treatment may not always be a necessary response and other measures to reduce the injury accident risk of the site may be both more cost effective and consistent with local transport policy. All decisions shall be fully documented on the Site Investigation Form, Annex C.

Any priority treatments will be identified and fed into the Transport Delivery Plan.

Site investigations will be commissioned or undertaken by the Council's road safety team. The road safety team will finalise the list of sites for treatment each year, based upon SCRIM data, injury accident histories, site investigations and other data held by the Authority. This data will include public reports of highways defects and service users' concerns.

Priority for treatment will be given to those sites with the greatest difference below the IL, where low skid resistance is combined with low texture depth and where the injury accident history shows there to be a clearly increased risk of wet or skidding accidents.

Cambridgeshire's Road Safety team will work with colleagues within the Highways Service and providers of highway services to ascertain the most cost effective treatments.

Slippery Road Signs

Signs will be erected where, following the above prioritisation processes (see also Annex C), treatment to improve skid resistance is scheduled to be undertaken. Upon completion of the works, signs will be removed.

Annex A – Road Network subject to routine Skid Resistance Testing

Road Number	From	To	Length (km)
Strategic Roads			
A1101	Lincolnshire Boundary	Norfolk boundary	12.72
A1303	A428	M11 junction 13	2.76
A605	Entire length		25.47
A10	Entire length		54.23
A141	Entire length		45.99
A142	Entire length		37.90
A505	Entire length		19.11
A1198	A14	A428	12.03
Total length of Primary roads			210.21
Main Distributor Roads			
A1101	Shippea Hill	B1411	13.22
A1303	M11 junction 13	A1304	20.30
A15	Entire length		2.73
A603	Entire length		18.61
A1096	Entire length		5.09
A1123	Entire length		39.29
A1198	A428	Hertfordshire boundary	20.28
A1301	Entire length		13.18
A1304	Entire length		10.14
A1307	Entire length		34.56
A1421	Entire length		3.76
A1309	Entire length		5.95
A1134	Entire length		19.82
B1040	A141	B1095	16.95
B1042	Entire length		6.56
B1043	C108	A14	2.44
B1049	A14	A1123	15.84
B1050	A14	A1123	13.97
B1095	Entire length		6.63
B1102	A142	A14	15.98
B1381	Entire length		8.07
Addenbrookes Road U7046	Hauxton Road	Dame Mary Archer Way	2.15
Total length of Main Distributor roads			295.52
Total length of testing road network			505.73

Annex B – Programme for review of Investigatory Levels

Road Number	2016/17	2017/18	2018/19
A1101	12.72		
A1303	2.76		
A605	25.47		
A10		54.23	
A141		45.99	
A142			37.90
A505			19.11
A1198			12.03
A1101	13.22		
A1303	20.30		
A15	2.73		
A603	18.61		
A1096	5.09		
A1123	39.29		
A1198	20.28		
A1301		13.18	
A1304		10.14	
A1307		34.56	
A1421		3.76	
A1309		5.95	
A1134			19.82
B1040			16.95
B1042			6.56
B1043			2.44
B1049			15.84
B1050			13.97
B1095			6.63
B1102			15.98
B1381			8.07
C108			2.15
Total km	**160.47**	**167.81**	**177.45**

Annex C – Site Investigation Form

General Information			
Name of Investigator		Date / time	
Weather conditions		Traffic conditions	

Site location and use	
Location and nature of the site (attach plan)	
Are there any features that could require users to stop or manoeuvre to avoid an accident?	
Has there been any change in site use since IL was set?	

Pavement condition data	
Site Category - (attach plan)	
Investigatory level - (attach plan)	
Test results - (attach plan)	
SCRIM deficiency - (attach plan)	
Also include excel spreadsheet as example provided	
Is the skid resistance consistent over the site?	
If no, what are the variations?	
Is the lowest skid resistance in locations where users have a specific need to stop or manoeuvre?	
Are there any individual 10m lengths that fall below the mean for an averaging length?	
Is the location significant, i.e. within a sharp curve?	
Does the site contain a sharp bend to the left in combination with braking or accelerating?	
What is the texture depth over the low skid resistance areas	

Are there any extreme values of rut depth or longitudinal profile variance that could affect vehicle handling or drainage of water from the carriageway?	

Accident history		
	%	Number
% wet accidents		
% skid accidents		
% wet skid accidents		

Visual assessment	
Is a visual inspection of the surface condition consistent with the survey data?	
Is the whole of the carriageway surface generally consistent with the measured nearside wheel track?	
If so, is the location such that it is likely to increase the risk of accidents occurring?	
Is the surface free from debris?	
Does water appear to drain adequately during heavy rain?	
Is the pavement free from defects such as potholes?	

Road users	
What is the type and volume of road user?	
Are observed traffic speeds appropriate to the nature of the site?	
What types of manoeuvres are made and what is the consequence if not completed successfully?	
Is there evidence that road users fail to negotiate the site successfully?	

Road layout	
Is the road design still appropriate for the speed, volume and type of traffic?	
Is the layout unusual or confusing to road users?	
Is the road particularly narrow?	
Is the layout appropriate for vulnerable road users?	
Are junction sizes appropriate?	
Are right turning vehicles adequately catered for?	
Are priorities at junctions clearly defined?	
Are signals operating correctly?	
Are signals / signs clearly visible to approaching motorists?	
Are all pavement markings and signs appropriate and visible in all conditions?	
Have old markings been removed properly	
Are thee any redundant signs that could cause confusion?	
Are all roadside objects on high speed roads protected adequately from vehicle impact ?	
Do sight lines appear to be adequate?	
Is the end of likely queues visible to road users?	
Does landscaping reduce the visibility, including signs?	

Additional information
Are there any other sources of information available, such as reports or visual evidence of damage only accidents or damage to street furniture?

Results and actions
Is action needed?
If not, why not?
If yes, what action is required?
Officer responsible for report: Signature: Date:

Appendix VIII

Adoption of New Non-Motorised User Routes and the Adoption of additional maintenance liability

1. Introduction

1.1 The maintenance of Cambridgeshire County Council's existing highway network is planned and managed through its Highway Infrastructure Asset Management Plan (HIAMP), reviewed annually. The County's various transport strategies provide the guiding principles regarding the strategic development and management of the transport network, including non-motorised user routes comprising public rights of way and cycle routes ('NMU routes').

1.2 Records of the County's highway assets are managed by the Asset Information and Asset Planning teams. These databases provide the basis for the maintenance of the highway network, and include NMU routes.

1.3 In order for the network to be effectively planned and managed, both the current and future maintenance liabilities have to be managed. The adoption of new roads is well regulated through the Highway Development Management process. There is also an existing policy specifically regarding the adoption of public rights of way through diversions under the Highways Act 1980.

1.4 This policy sets out how the County Council will decide what NMU routes it should adopt in future in terms of need, affordability and consistency. This is particularly important in the current economic climate of ever-reducing budgets where an asset management approach is being taken to highway maintenance.

1.5 The policy first sets out the process by which the County Council will decide what new NMU routes it will adopt in future, based on criteria applied equally to all potential candidates.

1.6 Secondly, it addresses situations where the County Council has to decide if it will adopt recorded public rights of way not previously maintainable at public expense. It also addresses public path order diversion proposals that would result in additional maintenance liability than is currently the case, such as a change of surface material or additional length.

2 Classes of public access

2.1 Most linear forms of public access in Cambridgeshire exist as public highways, which may or may not be maintainable at public expense, depending on their origin. However, access can also be provided by permission of a landowner, as explained at 3.3 below.

2.2 There are six classes of highway, ranging from public footpaths at the lowest level to carriageways at the highest:

- **Footpath** – provides users with the right to pass and repass on foot only. A footpath is geographically separate from carriageways with adjacent footways (pavements).
- **Bridleway** - provides the right to pass and repass on foot, bicycle and horse. However, cyclists should give way to pedestrians and horse-riders.
- **Restricted byway** - provides the right to pass and repass on foot, bicycle, horse and horse-drawn vehicles in equal rights.
- **Byway open to all traffic ('BOAT')** – provides the right to pass and repass on foot, bicycle, horse, horse-drawn vehicles and all motor vehicles. However they usually have a soft surface and many are not suitable for modern vehicles.
- **Cycle track** – may carry pedestrians and bicycles, or only bicycles depending on its designation.
- **All-purpose highway** – these are principally carriageways and carry all types of traffic from Non-Motorised Users to all motorised vehicles. Carriageways are divided into A, B, C and Unclassified categories. Unclassified status includes unsurfaced 'soft' roads. Carriageways may or may not contain footways, cycle tracks or multi-user routes for pedestrians, cyclists and equestrians adjacent to the section used by vehicles. Margins can be provided in or beside a carriageway for horses or driven animals if considered necessary.

2.3 Non-Motorised User routes (NMU routes) is a generic term coveringall types of public access that can be used by pedestrians, cyclists and equestrians and horse-driven carriages. They include footpaths, bridleways, restricted byways, cycle tracks, and footways and multi-user routes within the highway.

2.4 The lengths of the different classes of highway and other public accessin Cambridgeshire are shown in Table 1 at Document A. The majority of the highways shown in Table 1 are maintainable at public expense. 1.8% (58km) of public rights of way are known to be not maintainable at public expense; potentially this figure is as much as 9% (291km), depending on their historic legal origin.

2.5 The length of cycle tracks is a current estimate. However, it is likely that the figure is significantly higher, because cycle routes have been created over some decades not only by the County Council, but also under agency agreements with the District Councils. They are very poorly documented, and so the extent of the County Council's potential liability is unknown. A project is underway to identify the routes.

2.6 In addition to these highways, Cambridgeshire has 641km of permissive paths (footpaths, bridleways, restricted byways and cycle routes). The majority of these are maintained privately by the landowner. However, the County Council may be liable for maintaining many of the cycle routes, depending on the agreement (see 3.3-3.4 below).

3 Methods by which public rights of access are created

3.1 The County Council accrues new highways through a number of different legal mechanisms. Many arise through external parties, such as developers and Central Government transport schemes. The mechanisms are shown in Table 2 at Document B.

3.2 Highways are also accrued in a number of ways through the County Council's own initiatives, including strategic transport plans and third party schemes. These are set out in Table 3 at Document B. Capital schemes (documented and approved annually in the County Council's Transport Delivery Plan (TDP)) are often achieved through the County Council's own powers of 'build and adopt', which technically requires no formal documentation of legal creation. Local Highway Initiatives are approved separately by Members each year, and can include NMU schemes.

3.3 Public access can also be provided by permission of a landowner through a formal legal agreement or 'licence' (see Table 4 at Document B). This gives local communities additional valuable facilities, whilst protecting the land from permanent rights being accrued. The majority of permissive paths are not maintainable at public expense.

3.4 Many of the cycle routes provided in partnership with the charity Sustrans have been achieved through permissive agreements. Some, such as the Jubilee Cycle Path along Riverside in Cambridge run over existing public footpaths, leading to a dual status and potentially differing maintenance liabilities.

4 Maintenance Liability

4.1 Most new highways will be maintainable at public expense, but there are certain situations in which this will not be the case. These are listed at Table 5 at Document C. Diagram 1 at Document C shows the relationship of different categories of highways and their maintenance liability to the different legal systems of asset record management.

4.2 The tables at Document B show that the sources of public access are wide and varied. The County Council has influence over the location and design of most of these highways and permissive routes through negotiation with the parties concerned, and will accept them provided certain legal tests and technical specifications are met.

4.3 However, the Authority does not necessarily have control over how many highways it will accrue in a given year. This is because it is a function of many factors, such as the amount of development coming on-stream, the issues involved with each scheme, and when Central Government gives approval for major transport schemes.

4.4 Another factor is that landowners can apply to divert public rights of way that are not currently maintainable at public expense and, if the relevant legal tests for diversion are met, the County Council will become liable for such diverted paths. However, the burden of taking on maintenance liability is not one of the legal tests for diversions. This policy addresses this issue.

5. The Asset Management approach to adoption of NMU routes

5.1 In order to ensure that the County Council can afford to take on new NMU routes and public rights of way that are not currently maintainable at public expense, two sets of criteria have been developed. Proposals will be assessed against the relevant criteria for the category as set out below. The criteria can be found at Document D.

Criteria Set 1: Adoption of New NMU Routes

5.2 The first set of criteria at Document D applies to all new NMU routes proposed through i) the planning and development process in negotiation with Asset Management; ii) new public rights of way proposed by landowners or other third parties outside of the development process; and iii) through all the County Council's own transport initiatives. The application of these criteria will ensure an auditable consistency of approach. It will not affect proposals negotiated with the County Council's Highway Development Management team (under section 38 and 278 Highways Act 1980 agreements).

5.3 New NMU routes covered by this policy include:

- Public rights of way
- Dedicated cycle tracks
- NMU routes within the highway
- Permissive paths and cycle routes

5.4 The criteria are based on:

- Cambridgeshire County Council's Vision as set out in its 2016-27 Business Plan outcomes:
  - Older people live well independently
  - People with disabilities live well independently
  - The Cambridgeshire economy prospers to the benefit of all residents
  - People lead a healthy lifestyle and stay healthy for longer
  - People live in a safe environment
- Statements of Action from the County Council's Rights of Way Improvement Plan policy (adopted 2006, revised 2016).
- The Cambridgeshire Health & Well Being Strategy 2012-2017
- Good practice developed over years of experience by the County Council's Cycling team and Asset Information team.

5.5 In order to be successful, a scheme must achieve a threshold score of at least 75% (see scoring notes in Document D). A Viability and Affordability criterion will mean that schemes must demonstrate that they are sustainable in terms of ongoing maintenance. Schemes that cannot demonstrate this will not pass. Project Managers will be expected to agree the Viability and Affordability score with Highway Asset Management and the relevant local highways office. Scoring for the other criteria will need to be agreed with Asset Information

and the relevant Highway or ROW Officer. Solutions to enable viability include ensuring that the route is built to the County Council's Housing Estate Road Construction Specification, or offering an agreed commuted sum.

5.6 Schemes that pass will still have to undergo their relevant legal process, for example Public Path Creation Agreements and Orders through the formal Highways Act 1980 process. Schemes that are adopted via the Highways Development Management process and satisfy the relevant specification will be deemed to pass and will not be subject to the other criteria.

5.7 The criteria will also apply where it is proposed that the County Council takes on the maintenance liability of a permissive route for the life of the agreement.

Criteria Set 2: Public Path Diversion Order Applications

5.8 The second set of criteria at Document D applies to all public path diversion order applications under the Highways Act 1980 (HA80) and the Town & Country Planning Act 1990 (TCPA90), including like-for-like diversions; routes that are recorded public rights of way but are not currently maintainable at public expense; and packages to reorganise the network.

5.9 The criteria are based on a revised version of the County Council's Requirements for making a diversion order (previously adopted as policy in 2010), and provide an equitable means of assessing the maintenance liability that would be incurred. The criteria consider: accessibility relating to the County Council's duty under the Equality Act 2010; the benefit to the Authority and communities from resolving long term maintenance problems; the benefit to the PROW network; and the benefit to landowners from improved land management. Applications will still have to meet all the HA80 and TCPA90 legal tests.

5.10 The criteria are split into two elements:

- Six Pass/Fail criteria relating to County Council requirements that must be met in order for an application to be considered. If an application fails one of these criteria, it fails regardless of its numerical score. Officers will then revert to the applicant to discuss their options.
- Numerically scored criteria, where a 70% threshold must be met in order for an application to be taken forward. If an application passes the Pass/Fail criteria but fails the 70% numerical threshold, it will not proceed and officers will revert to the applicant to discuss their options.

5.11 If the maintenance liability incurred would be significantly greater than the existing, an application may still pass if a solution is agreed, such as a commuted sum or an agreement for a third party to maintain the route instead.

5.12 Cambridgeshire County Council's Public Path Order Diversion Requirements are now encapsulated in the *Criteria 2: Public Path Order Diversion Applications*. The 'Flow Chart for Public Path Order Applications' has been amended to reflect these changes (see Document E).

6. References

Cambridgeshire County Council - Housing Estate Road Construction Specification - http://www.cambridgeshire.gov.uk/info/20081/roads_and_pathways/115/highways_development
Highway Infrastructure Asset Management Plan
http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/66/transport_plans_and_policies/4
Rights of Way Improvement Plan
http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/66/transport_plans_and_policies
Local Transport Plan
http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/66/transport_plans_and_policies
Transport Delivery Plan
http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/66/transport_plans_and_policies/4

7. Glossary

Term	Definition
HA80	Highways Act 1980
HIAMP	Highway Infrastructure Asset Management Plan
LTP	Local Transport Plan
NMU Routes	Non-Motorised User Routes
ROWIP	Rights of Way Improvement Plan
PROW	Public Rights of Way
TCPA90	Town & Country Planning Act 1990
TDP	Transport Delivery Plan

8. Documents

A Sources of highway accrual
B Highways not maintainable at public expense and the Relationship between highways and maintenance liability
C Lengths of highways and public access in Cambridgeshire
D NMU Adoption Criteria
E Public Path Order Applications Flow Chart

DOCUMENT A

Table 1 Lengths of highways and other public access in Cambridgeshire

Class	km	Total (km)	% of Total Network	Maintained by CCC (km) (including routes requiring further investigation)	% Network maintained by CCC (including routes requiring further investigation)	% not maintainable at public expense	Length of routes requiring further investigation (km)	% Network requiring further investigation	Total % network potentially not maintainable at public expense
Footpaths	2,229		68.9%	2204	68.1%	0.77%	8.3	0.37%	1.14%
Bridleways	595		18.4%	563	17.4%	1.01%	8	1.27%	2.28%
Restricted Byways	5		0.2%	5	0.2%	0.00%	0.4	8.00%	8.00%
Byways	407		12.6%	407	12.6%	0.02%	217	53.27%	53.29%
Total PROW		*3,237*	*(PROW) 100%*	*3,178*	*98.2%*	*1.80%*	*233.3*	*7.21%*	*9.01%*
Cycletracks	64		1.4%	64	1.4%				
Soft roads	133		2.9%	133	2.9%				
U roads	2,280		50.0%	2,280	50.0%				
B roads	545		12.0%	545	12.0%				
C roads	1,117		24.5%	1,117	24.5%				
A roads	419		9.2%	419	9.2%				
Total roads and cycletracks		*4,558*	*(Roads+CTs) 100%*	*100%*	*100%*	*0%*	*0%*	*0%*	*0%*
Total highways		**7,794**	*100%*						
Permissive paths (including cycleways)	641	**641**		unknown	unknown	unknown	unknown	unknown	unknown
All routes		**8,435**							

DOCUMENT B – Sources of Highway Accrual and Liability

Table 2 External sources of highway creation and associated maintenance liability

Source	Scheme type	New CCC Highway Created	Legal Mechanism	Liability
Highways England	Major roads e.g. A14	New/diverted side roads, PROW, cycle tracks and NMU routes	Development Consent Order; Side Roads Order	Maintainable at public expense by CCC
Network Rail	Major rail infrastructure schemes	New/diverted side roads, PROW, cycle tracks	Transport & Works Act 1992 Order; Highways Act 1980 s118A/ 119A	Maintainable at public expense by CCC
Developers	Housing, commercial, mineral developments	Roads, cycle tracks, PROW	Highways Act 1980 Section 37/38/278; Town & Country Planning Act 1990 s247	Maintainable at public expense by CCC
Developers	Housing, commercial, mineral developments	PROW	S106 obligations requiring Highways Act 1980 Section 25/s30 agreements; s26/s118/s119 orders; or Town & Country Planning Act 1990 s247/s257 orders	Maintainable at public expense by CCC except for s30 HA80 agreements
Parish and Town Councils and other third parties	Local Highway Initiatives	Cycle tracks; footways; margins for horses; widening	Highways Act section 65; s66; s71; s72 and others	Maintainable at public expense by CCC. Widening done by parish/town councils may not be maintainable at public expense unless formally adopted by CCC.
Landowners/parish/ Town councils	Public Path Orders	PROW	Highways Act 1980 ss25; 26; 30 119; 118	Maintainable at public expense, *except* for s30 agreements.
Landowners	Public paths	Public paths	Express dedication at common law	Not maintainable at public expense
Public applications/proactive CCC orders	Unrecorded PROW	PROW	Wildlife & Countryside Act 1981 section 53	May or may not be maintainable at public expense, depending on the legal history
Public requests/proactive CCC investigations	Unrecorded roads/cycle tracks	Public roads/ cycle tracks	Highways Act 1980 ss 31; 32; 36	May or may not be maintainable at public expense, depending on the legal history

Table3 Internal sources of highway creation and associated maintenance liability (cont.)

Source	Scheme type	New CCC Highway Created	Legal Mechanism	Liability
CCC	Major road schemes e.g. bypasses	Roads; alterations to PROW; creation of NMU routes	Highways Act 1980 s24	CCC
CCC	Cycle schemes	Cycle tracks (which may be shared pedestrian and cycle or cycle only); NMU margins within highway	Highways Act 1980 ss24, 65, 71, 72	CCC
CCC	Discovery of unrecorded PROW	PROW	Wildlife & Countryside Act 1981 section 53	May or may not be maintainable at public expense, depending on its legal history
CCC	Public path orders to resolve longstanding problems	PROW	Wildlife & Countryside Act 1981 section 53; ss25, 26, 118, 119 Highways Act 1980	May or may not be maintainable at public expense, depending on its legal history

Table 4Other sources of public access and associated maintenance liability

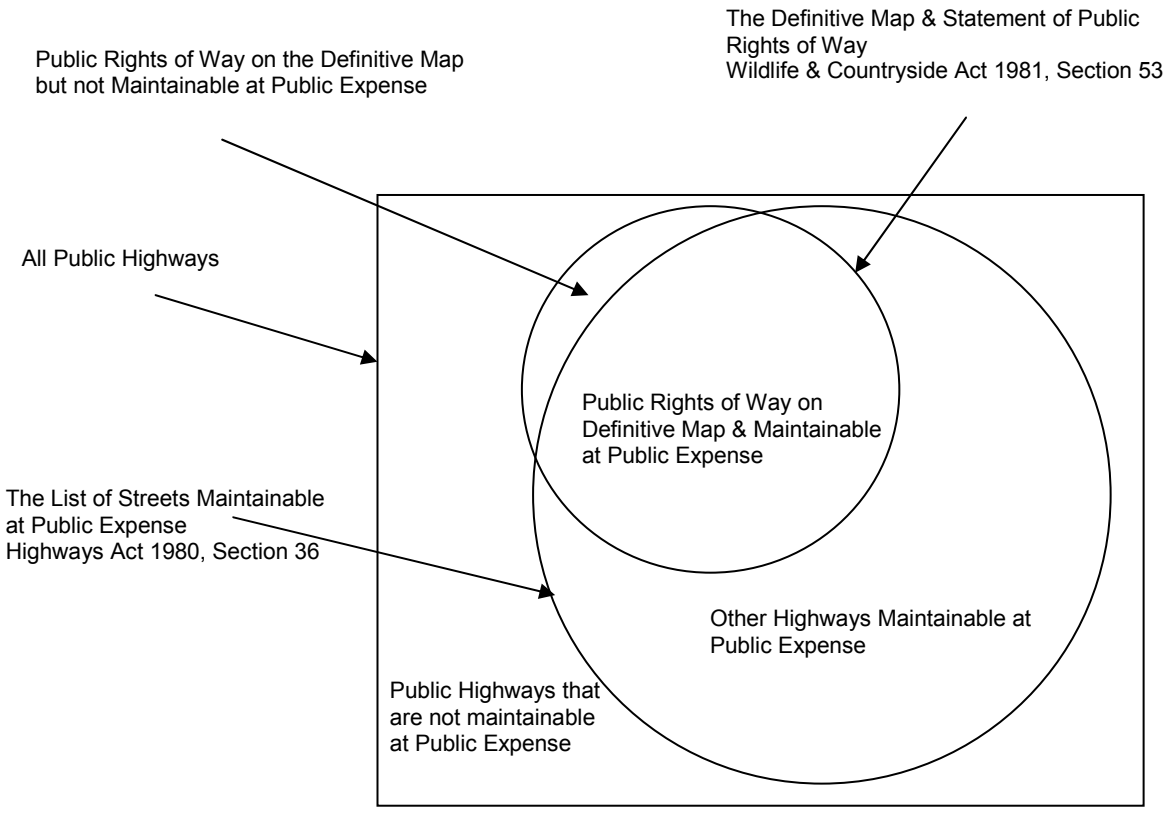
Source	Scheme type	Type of Access Created	Legal Mechanism	Liability
CCC, District Councils, Sustrans and other third parties	Cycle schemes	Shared pedestrian and cycle routes; separate cycle routes	Licence or permissive agreement	Depends upon terms of agreement
CCC	Permissive rights of way	Pedestrian, cycle, equestrian, driven horses	Licence or permissive agreement	Usually landowner but depends upon terms of agreement

DOCUMENT C

Table 5 Methods through which highways can be created but which are not maintainable at public expense

	Highway created	**Legal mechanism**
1	Public rights of way accrued through public applications, mainly created through usage over time since 1959 (typically 20 years)	Section 53 Wildlife & Countryside Act 1981
2	Routes discovered to be highways (anything from a footpath up to a road) for which documentary evidence proves they are not maintainable at public expense	Sections 31, 32, 36 Highways Act 1980
3	Where a town or parish council has entered into an agreement with a landowner to create a public right of way. The parish council can maintain such paths themselves. They can be added to the Definitive Map & Statement (the legal record of public rights of way) which gives them protection, for example they would be disclosed for property searches. However, there is no obligation on the Highway Authority to maintain them.	Section 30 Highways Act 1980
4	Where a landowner has made an express dedication at common law that a certain route shall be a highway of a certain status. However, there is no obligation for the Highway Authority to adopt the maintenance liability for such a route, and it would not be possible for a member of the public to serve notice on the Authority requiring it to put the route into good order as he or she could for a highway maintainable at public expense.	Express dedication at common law, captured in a deed

Diagram 1 The relationship between highways and maintenance liability



DOCUMENT D

Criteria Set 1:Adoption of Non-Motorised User Routes Criteria - New Highways

Subject area	Criteria		Maximum available score	Scheme	Notes
	No.	Item (SOA = Statement of Action in ROWIP)			
CCC Estate Road Specification	1	Project design complies with requirements of CCC Housing Estate Road Construction Specification (PASS or FAIL only)	Pass or Fail		
Maintenance & Financial	2	Viability and Affordability (PASS or FAIL only)	Pass or Fail		
Safety	3	Mitigates conflict between potential users and different modes on an existing route, e.g. by splitting/removing one or more modes of user	3		
Connectivity & Safety	4	Provides safer road crossing and/or off-road link not currently provided for (SOA2)	6		
Connectivity	5	Provides a missing link to a wider network, supporting physical and mental well being (SOA2, SOA5)	2		
Connectivity	6	Enables a new circular route (Whole or in part) supporting physical and mental well being (SOA2, SOA5)	3		
Connectivity	7	Provides convenient access to work, education centres, health facilities and/or transport hubs	4		
Connectivity; convenience	8	Provides a sustainable transport connection (Walking, Cycling or Equestrian) with an existing or new development (SOA3)	4		
Connectivity	9	Provides convenient access for users to other local amenities(e.g. community facilities, shopping, religious centres)	3		

Equalities Impact	10	Project will benefit pedestrians	3		
Equalities Impact	11	Project will benefit equestrians	3		
Equalities Impact	12	Project will benefit cyclists	3		
Equalities Impact	13	Significant negative impact on accessibility - Equalities Act	-3		
Equalities Impact	14	Significant increase in accessibility - Equalities Act	3		
Equalities Impact; health & well-being	15	Increases access to green space and opportunities for physical and mental wellbeing	3		
Consultation	16	Support from local communities	3		
Biodiversity Duty	17	Significant negative impact on biodiversity	-2		
Promoted route	18	Route will be on a promoted way e.g. National Cycle Network, Ouse Valley Way	1		
		TOTAL			
BONUS POINTS					
Enjoyment; convenience	19	Enhancement of a route currently used	Plus 1		
Features of Interest	20	A route leading to, through or past (200m radius) a site of historic, cultural or wildlife interest. (BONUS - 1 point for each)	Plus 3		
Biodiversity Duty	21	Route enhances biodiversity	Plus 2		
Equalities Impact; health & well-being	22	Route allows/enhances access for disadvantaged groups (Cambridgeshire Health & Well Being Strategy; JSNA)	Plus 2		
		Total Score /44 +8 bonus points (Pass mark 75% i.e. 33)			

New Highways: Scoring Notes
These criteria are only to be used for proposals that involve the creation of completely new routes.
Scoring will be applied to each proposal separately. If a number of competing proposals are being offered, schemes will be ranked according to score, with higher scores being prioritised.

Where a criterion is deemed to be of higher importance and so has a higher possible maximum score, the reasoning behind this should be clearly recorded so any disputes can be addressed.

If a proposal passes Criterion 1 (green), then the whole scheme passes overall and all other criteria are overridden. If it fails this questions, this does NOT mean the whole scheme fails, but it will still need to pass Criterion 2 and meet the 75% pass threshold. For example, schemes with unbound surfaces are not built to the County Council's Housing Estate Road Construction Specification but may still meet the other criteria.

If a proposal fails Criterion 2 (orange), then the whole scheme will fail and all other criteria are overridden.

SOA numbers in brackets refer to the Statement of Action in the County Council's adopted Rights of Way Improvement Plan
http://www.cambridgeshire.gov.uk/info/20006/travel_roads_and_parking/66/transport_plans_and_policies

Threshold: A scheme must reach the threshold of 75% of maximum score in order to be considered for adoption. However, schemes will still have to undergo their relevant legal process e.g. Public Path Orders through the formal consultation process, and may later be abandoned in accordance with the Council's Public Path Order Policy. Similarly, CCC highway initiatives will still need to be passed through the TDP or LHI process, with appropriate asset records certification at the end of the process.

There are 44 core marks, but schemes can score additional bonus points which can result in an overall score that meets the 75% threshold.

Criteria Set 2: **Non-Motorised User Routes Adoption Criteria - Public Path Diversion Applications under S119 Highways Act 1980 and S257 Town and County Planning Act 1990**

Subject area	Criteria		Maximum available score	Scheme	Notes
	No.	Item (SOA = Statement of Action in ROWIP)			
Consultations	1	Pre-application consultations have been carried out with the prescribed bodies.	Pass or Fail		
Consultations	2	The existing route is available for use and any 'temporary' obstructions have been removed, in order to allow a comparison to be made. Any request for exemption will be decided by the Director Economy, Transport and Environment Services as to whether or not that is appropriate.	Pass or Fail		
Consultations	3	No objections are received to the proposals during the statutory consultation period prior to making an order. However, the County Council will review this criterion in individual cases in light of objections and potential public benefit of the proposal. If the County Council consider the objection to be irrelevant, this will class as a pass.	Pass or Fail		
Width	4	A minimum width of 2m is provided for a diverted footpath, and a minimum width of 4m for a diverted bridleway. In exceptional cases, e.g. cross-field paths, the County Council may, taking into account all the available facts, require such a width as it considers reasonable and appropriate.	Pass or Fail		

Maintenance & Financial	5	If maintenance liability is significantly greater than existing, the landowner has agreed to undertake or fund future maintenance.	Pass or Fail		
Equalities impact - Gaps & Gates	6	The proposed route would have no stiles or gatesor allows for people with mobility issues.	Pass or Fail		
Equalities impact	7	Significant negative impact on a class of user - Equalities Act	-2		
Equalities impact	8	Significant increase in accessibility - Equalities Act	2		
Maintenance & Financial	9	Resolves long-term maintenance problems	3		
Maintenance & Financial	10	The proposed new route is not less convenient for maintenance than the original.	2		
Use of Land	11	The effect the order would have on the land served by the existing path and also the land across which the new path would run.	2		
Connectivity	12	The proposed new route is substantially as convenient to the public as the original.	3		
Connectivity and enjoyment	13	User enjoyment is similar to the existing route or is enhanced by the proposal	3		
Connectivity	14	There are no other reasonable or viable alternatives	2		
Connectivity & Enjoyment	15	A suitable alternative path is provided for every path that is to be diverted.	1		
Connectivity & Enjoyment	16	The proposal maintains or improves usefulness of the Rights of Way Network	2		
		Total Score out of /20 (Pass mark 70% i.e. 14)	**20**		

Diversion Applications: Scoring notes

A scheme must reach the threshold of 70% of maximum score in order to be adopted. However, schemes will still have to undergo their relevant legal process e.g. Public Path Orders through the formal consultation process, and may later be abandoned in accordance with the Council's Public Path Order Policy.

There are six Pass/Fail criteria relating to County Council requirements that must be met in order for an application to be considered. If an application fails one of these criteria, it fails regardless of its numerical score. Officers will then revert to the applicant to discuss their options.

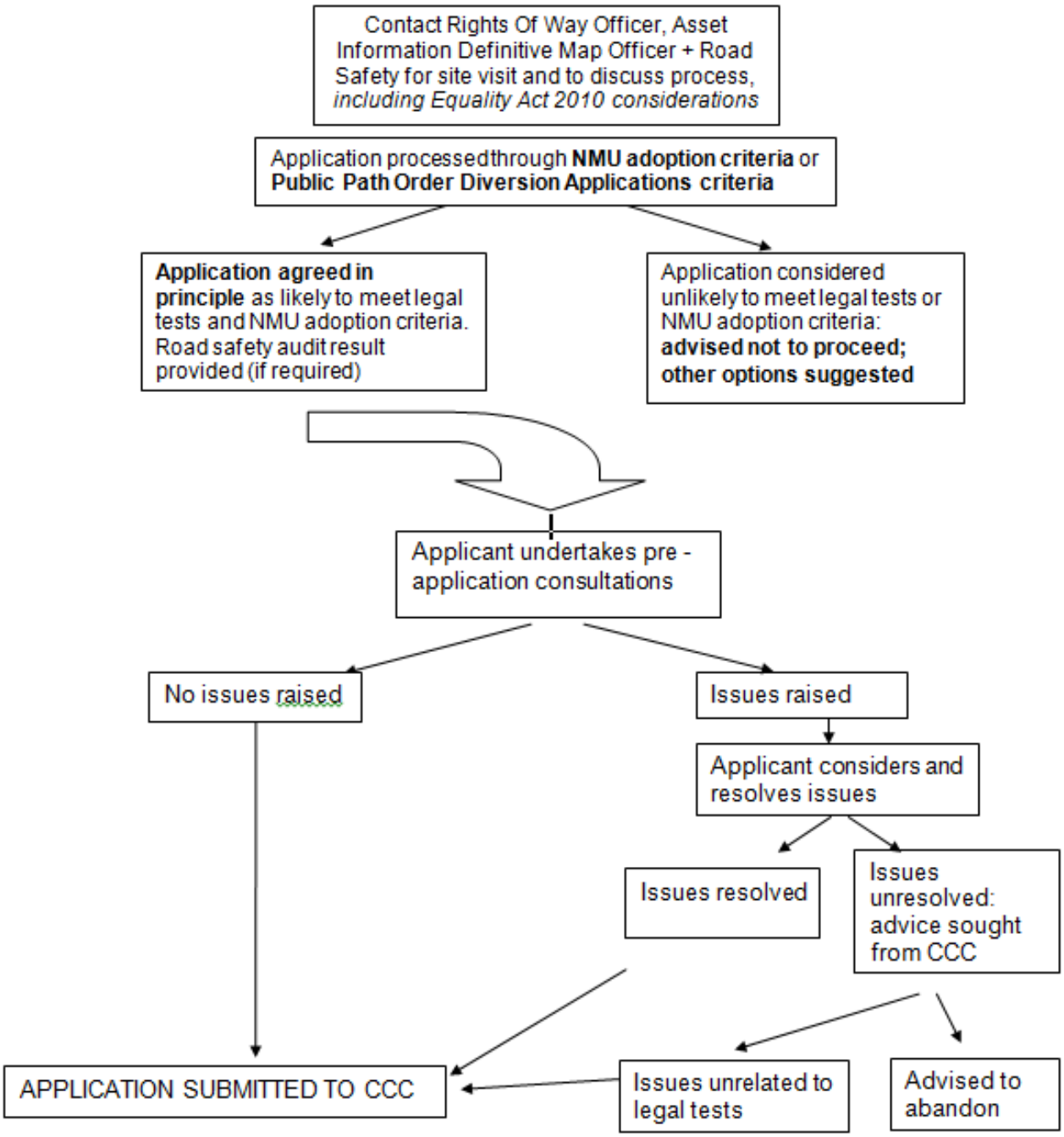
For the numerically scored criteria, a 70% threshold must be met in order for an application to be taken forward. If an application passes the Pass/Fail criteria but fails the 70% numerical threshold, it will not proceed and officers will revert to the applicant to discuss their options.

If the maintenance liability incurred would be significantly greater than the existing, an application may still pass if a solution is agreed, such as a commuted sum or an agreement for a third party to maintain the route instead.

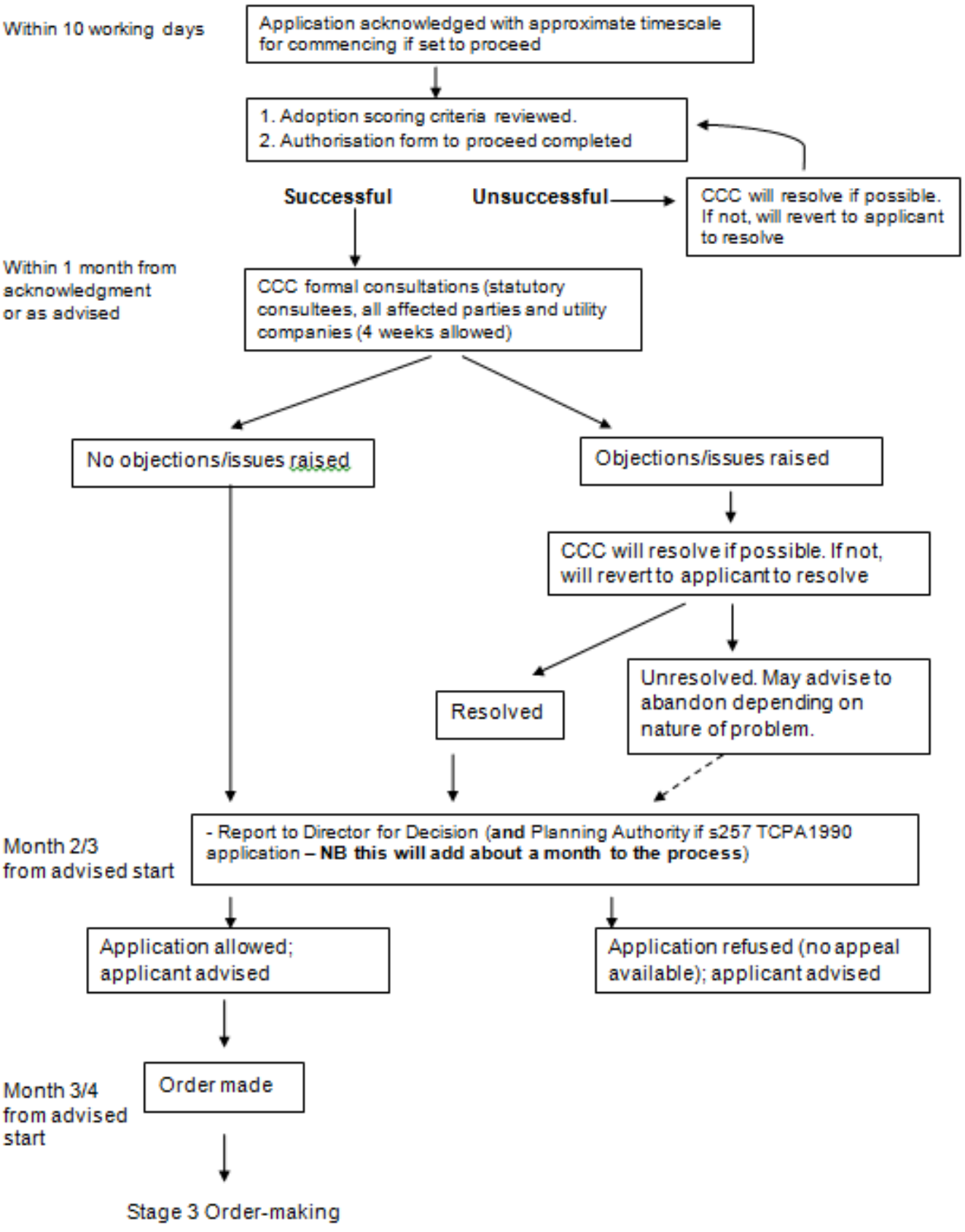
DOCUMENT E - Cambridgeshire County Council
Highways Act 1980 & Town & Country Planning Act 1990
Public Path Order Applications:
Flow chart of process

Please note that further guidance is available from NE112 - A guide to definitive maps and changes to public rights of way - 2008 Revision
http://naturalengland.etraderstores.com/NaturalEnglandShop/product.aspx?ProductID=8f4433c1-0c14-488e-96b6-b7d67bacbfd4

Stage 1: Pre-application preparations



Stage 2: Formal Consultations and Decision



Stage 3: Order-making