



Network Management Leaflet No. 4 (April 2010) Highway Maintenance

How is highway maintenance work managed across the county?

The county is divided into 3 similar sized network areas with a highway maintenance team in each area:

- South, which includes Cambridge City and South Cambridgeshire
- NorthEast, which comprises Fenland and East Cambridgeshire
- West, which covers Huntingdonshire

What budgets are available for highway maintenance work?

Highway maintenance work is funded from three budgets:

General Maintenance Budget

This currently provides around £10million from the council's revenue budget for highway maintenance work. It is divided as follows:

Cyclic maintenance work: this includes grass cutting, gully emptying and weed killing which are carried out each year to comply with our maintenance policies.

Surface dressing: this is used to prolong road condition and to improve the road surface and skidding resistance.

These currently account for between 20% and 30% of the general maintenance budget.

What then remains of the budget is allocated to general maintenance work including pothole repairs, replacing damaged kerbs, highway drainage repairs and broken or uneven paving slabs. Each network area is allocated a percentage of the budget based on road length with weighting factors applied to reflect the category of road in each area as shown in the table below.

Class of Road	Principal (A roads)	Non-Principal (B & C roads)	Unclassified	TOTAL	% of budget
Road length (kilometres)	405	1,616	2,321	4,342	
South network area	169	431	838	1,438	32.6%
NorthEast network area	177	651	802	1,630	38.9%
West network area	60	534	680	1,274	28.5%
Weighting factor for road category	x 3	x 2	x 1		
Weighted road length (kilometres)	1,215	3,232	2,321	6,768	
% split from general maintenance	18%	48%	34%	100%	

Local Transport Plan (LTP) Budget

This is a capital budget of approximately £6million a year allocated by Central Government that funds around 50 carriageway, footway/cycleway surfacing or drainage schemes.

How are resurfacing and drainage schemes selected?

The County's Asset Plan records the condition of the road network and the data it contains is used each year to determine the highest priorities for the work programme. Such

factors as its place in the road hierarchy and condition measurements such as rutting, profile, cracking, texture, skid resistance and structural integrity are taken into account through this process. The initial priority list is then vetted by the Head of Network Management in consultation with the Network Asset Engineer and local Area Managers responsible for highway maintenance, before a work programme is put forward for approval by councillors.

Once the budget is approved by councillors, the schemes are implemented in priority order up to the amount of budget available.

How can I find out which schemes are being funded?

Details of the annual surfacing and drainage work programme are available in the Network Service Plan, which is available on this link:

<http://www.cambridgeshire.gov.uk/transport/strategies/network/>

How is maintenance work programmed?

Whenever possible we try to undertake planned maintenance works at times that will minimise any disruption or delay on the road network. We try to carry out as much work as possible during the school holidays and the summer period when traffic flows are generally lighter but there are limits to how much work we can carry out on the road network in an area at the same time.

On the busier parts of the road network we avoid starting work during the morning peak period and remove road works or suspend operations where possible before the start of the evening peak period.

We are required to book road space in the same way as others who work on the road network, such as the utility companies, and the County Council's Traffic Manager is responsible for ensuring that road works for different schemes do not clash.

In genuine emergencies, such as a road collapse, we attend site as soon as possible irrespective of whether road space has been booked.

What resources are available to undertake highway maintenance work?

We have various construction resources available including Cambridgeshire Highways small works crews, civil engineering gangs and surfacing teams.

Small works crews are used to undertake a wide variety of small scale maintenance works such as pothole and sign repairs, sign cleaning, cutting back overhanging trees and hedges and emergency call outs to make situations safe before full repairs are undertaken. Generally, the tasks they undertake take up to half a day.

Civil engineering gangs take on larger repairs to the highway including kerbing and patching works, small scale resurfacing and drainage repairs. These jobs generally take between half a day and 10 days to complete.

When larger scale resurfacing works are required these are undertaken by Cambridgeshire Highways surfacing teams or by specialist surfacing teams.

These resources are supported by other specialists who undertake such tasks as grass cutting, gully emptying and surfacing dressing as part of what is known as the annual cyclic maintenance programme.

How do you decide which repairs are done and when?

Our budget is cash limited and as demand for maintenance work always exceeds the budget available to us, we have to set priorities across all maintenance work areas. We use a risk assessment approach to prioritise work. We also set investigation levels for a wider range of highway faults, which we use to decide whether a repair is warranted.

Highway defects are inspected to assess the risk they present to road users. We use a scoring system to decide the level of risk which is based on the likely effect on highway users (the Impact) and the likelihood of the defect affecting road users (the Probability). The risk is calculated by multiplying the Impact by the Probability. The risk score sets the timescale to rectify the defect. The table below shows the risk assessment scores and the response times for each category of risk:

PROBABILITY → IMPACT ↓	Very Low (1)	Low (2)	Medium (3)	High (4)
Negligible (1)	1	2	3	4
Low (2)	2	4	6	8
Noticeable (3)	3	6	9	12
High (4)	4	8	12	16
Response category	Category 2(L)	Category 2(M)	Category 2(H)	Category 1

Response time:

Category 1: make safe or repair within 24 hours

Category 2(H): make safe or repair within 7 days

Category 2(M): repair within 28 days

Category 2(L): repair during the next available programme, schedule more detailed inspection, or review condition at next inspection, based on an assessment of the risk of deterioration before the next visit

How do you ensure the work is done as cost effectively as possible?

When ordering work we need to ensure that we package work into larger jobs, whenever possible, to minimise the number of visits by gangs, reduce travel time and traffic management set up costs and maximise the time the labour force spends on site. This can sometimes mean that some work has to be delayed until we have sufficient work in an area to justify a visit from a work gang. Whilst this means that some repairs take a little longer to be done, it does allow us to stretch the budget further.

We aim to recycle all the material we remove from our roads to reduce costs. Wherever practical and cost effective, we use repair techniques that recycle the existing road or footway surface when carrying our repairs.

We have installed 'hot boxes' to allow bituminous materials to be kept in storage in our depots to avoid making multiple trips to asphalt plants to collect hot materials. This significantly reduces the unit cost of surfacing material which allows us to carry out more work.

We programme our works so that they cause as little disruption as possible to highway users, as delays to the public cost time and money. By planning works during school holidays, the summer period or weekday off-peak periods, when traffic flows are lower, we can reduce delays. However, it is not possible to programme all works during these times and some delays are inevitable. We try to avoid undertaking works in town and city centres in the busy pre-Christmas shopping period.

What checks are carried out to see what repairs are needed?

We have a team of inspectors who carry out regular inspections of the county road network in accordance with inspection frequencies approved by councillors. Highway inspectors record and risk assess highway defects and then order repair work within the appropriate timescale. Details of our inspection regime are set out in our highways policies document which is available on this link:

<http://www.cambridgeshire.gov.uk/transport/strategies/highwaypol/>

Can I report a fault or defect on the highway?

We encourage the public to report highway defects and faults so that we can check them out and get them fixed as soon as appropriate. When we receive a fault report we will visit the site within five working days and assess what repair is required using the risk assessment method explained above. If you request feedback on your fault or defect report and you supply us with contact details, we will let you know what is happening and when.

How can I report a highway defect?

You can report any defect on the highway by:

- By calling 0345 045 5212
- On line: <http://tinyurl.com/3ae99w3>

Using these methods ensures we are able to keep a proper record of repair requests and to allocate them to the appropriate team member.

If you find a problem on the highway out of general office hours (8.30am - 5pm) which requires urgent attention you are advised to contact the Police who will then contact us using our emergency contact number.

Who do I contact for information?

If you wish to discuss any aspects of highway maintenance please contact your Area Manager (Maintenance). You can do this by:

Calling Cambridgeshire County Council on 0345 045 5212

Emailing your Area Manager (Maintenance):

Cambridge and South Cambridgeshire – Mick Oakman
michael.oakman@cambridgeshire.gov.uk

East Cambridgeshire and Fenland – Graham Mallot
graham.mallott@cambridgeshire.gov.uk

Huntingdonshire – Richard Kingston richard.kingston@cambridgeshire.gov.uk