Appendix 1

# Place and Sustainability

## Highways Asset Management Strategy

Cambridgeshire County Council

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# Executive Summary

This document sets out how Cambridgeshire County Council (CCC) manages and maintains the highway infrastructure for which it is responsible, and covers the development, maintenance, and operation of Cambridgeshire's highway network.

It brings together the County Council Corporate and the Combined Authority's Local Transport Plan objectives, detailing how the priorities and principles of asset management will be used to ensure that the assets the authority is responsible for maintaining assets the author meet the needs of Cambridgeshire's communities and deliver value for money, whilst aligning with best practice.

The National Code of Practice (CoP) "Well Managed Highway Infrastructure" was published in October 2016. The Code contains fewer prescriptive standards and promotes a more risk-based approach. This Strategy reflects the Authority's implementation of the key elements of the 2016 Code and 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".

The Strategy sets out how progress in implementing the asset management approach is monitored. The integrated approach promoted throughout enables the consideration of the wider issues associated with the management of the county's transport network, such as sustainability and growth pressures.

The purpose of this Strategy 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 highways are managed and maintained.
- Enable the delivery of value for money through efficient and effective highway service provision.

This Strategy sets out how we will follow a preventative, data led, and risk-based approach to highway maintenance, intervening early to extend asset life and reduce long-term costs.

Key elements include:

- **Asset Coverage**: Defines which assets are managed under this Strategy and which are excluded (e.g. motorways, street lighting under Private Finance Initiative (PFI)).
- **Lifecycle Planning**: Uses whole-life costing and condition data to guide investment decisions.
- **Asset Management**: Identifies the approach we will take to managing each of our highway assets.
- **Inspection & Risk Management**: Sets out inspection frequencies, intervention levels, and prioritisation criteria for repairs.
- **Environmental Commitment**: Focuses on carbon reduction, recycling, and climate resilience in highway maintenance.

- **Road Safety**: Details of how the network will be managed with a focus on road safety and incident prevention.
- **Highways Enforcement**: Sets out clear areas of enforcement on the public highway.
- **Customer Engagement**: Establishes clear communication protocols and service standards to improve public satisfaction.
- **Performance Monitoring**: Introduces Key Performance Indicators (KPIs) to track progress and drive continuous improvement.

The overarching purpose of this Strategy, as well as demonstrating alignment with asset management principles is to ensure we deliver **better**, **safer,** and **more sustainable journeys** across Cambridgeshire for our residents, communities, and other highway users in line with Cambridgeshire County Councils vision, which is to create a **greener**, **fairer,** and **more caring** Cambridgeshire. Following this approach will ensure that Cambridgeshire's highways continue to support communities, economic growth, and environmental sustainability.

**It is anticipated that this Strategy will be reviewed and updated annually with respect to lifecycle planning and asset management strategies.**

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# Our Vision

Cambridgeshire County Council has a clearly defined vision which is to create a **greener**, **fairer,** and **more caring** Cambridgeshire. We are responsible for maintaining a varied highway network on behalf of our communities and travelling public, this includes over 4,500km of roads, 2,700km of footways, and thousands of supporting assets such as bridges, drainage systems, signage, and trees.

This Highways Asset Management Strategy and the associated Asset Management Plans have been carefully considered to demonstrate how we will maintain these highway assets, whilst ensuring we are aligned with and help deliver this vision, recognising the vital role Cambridgeshire's local highway network has in achieving this.

This Highway Asset Management Strategy, and the associated Asset Management Plans and documents will be reviewed annually to reflect changing demands, funding availability, and emerging challenges such as climate change and population growth.

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# Policy Context

This document identifies how Cambridgeshire County Council, as the Local Highway Authority, meets its statutory duties under the Highways Act 1980.

This document has been produced in accordance with, and with reference to the following national guidance:

- The Highway Maintenance Efficiency Programme (HMEP) - 'Highway Infrastructure Asset Management' and "Prevention and a Better Cure."
- Well Managed Highway Infrastructure: A Code of Practice.
- The Department for Transports Road Infrastructure and guidance.

In addition, this document draws on relevant local policies and plans specific to Cambridgeshire County Council.

Cambridgeshire County Councils refreshed Strategic Framework 2023-2028 sets out how we have been making progress towards the council's vision of a **greener, fairer,** and **more caring** Cambridgeshire.

We will continue to work towards this vision by being closer to our communities, working with partners and residents so that Cambridgeshire becomes **greener, fairer,** and **more caring** in the ways that are most suitable for the variety of people and communities we serve.

The following infographic illustrates our seven ambitions and the areas we are committed to meeting.

Through this Strategy we demonstrate how we make a significant contribution towards meeting a number of these including:

**Ambition 1: Net zero carbon emissions for Cambridgeshire by 2045, and our communities and natural environment are supported to adapt and thrive as the climate changes.**

We recognise that we are very carbon-intensive due to the work we deliver and the materials we must use to do this. We are committed to reducing this as much as possible through changing how we work and the materials we use.

Our asset management approach is focused on minimising the environmental impact and carbon footprint of our maintenance and improvement activities. This asset management approach is predicated upon preventative maintenance treatments being applied to highways at the appropriate points in their lifecycles.

Such preventative maintenance minimises the need for deeper, more expensive, more carbon intensive treatments to be applied at later dates. Deeper treatments are the most environmentally harmful as they require greater use of materials (including virgin aggregates) and associated transport. These carbon emissions are exacerbated by road users having to travel further via diversion routes and having to wait at traffic control, such as traffic signals.

**Ambition 2: Travel across the county is safer and more environmentally sustainable.**

We are responsible for ensuring that our highway network is safe for everyone, this, and associated documents detail how we will do this.

This approach will support safer journeys by ensuring our footways, cycleways and carriageways are smoother and that our routes are well maintained. Our maintenance programmes include a range of surface improvements, including works to some of the county's soil affected roads. Works to these roads will play a key role in keeping this challenging part of the county's highway network safe.

Furthermore, the Council is committed to decarbonising the delivery of planned capital maintenance works where possible by implementing the follow changes:

- Use of Cold Recycled Binder Materials instead of conventional asphalt in footway maintenance works. This is projected to reduce carbon expenditure by 40%.
- Trialling low carbon cements in road reconstruction schemes, instead of conventional, which is projected to reduce carbon emissions by 70-80%.
- Replacing conventional diesel in construction plant with hydrogenated vegetable oil, resulting in an 80% saving in carbon emissions.

**Ambition 3: Health inequalities are reduced.**

Consistent with Ambition 2, our commitment to maintaining safe routes will help prevent injuries on our network. Furthermore, by promoting schemes where Active Travel provision may be improved, and improving access to public transport links, we can help create an environment that gives people the opportunity to make healthier choices.

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**Ambition 4: People enjoy healthy, safe, and independent lives through timely support that is most suited to their needs.**

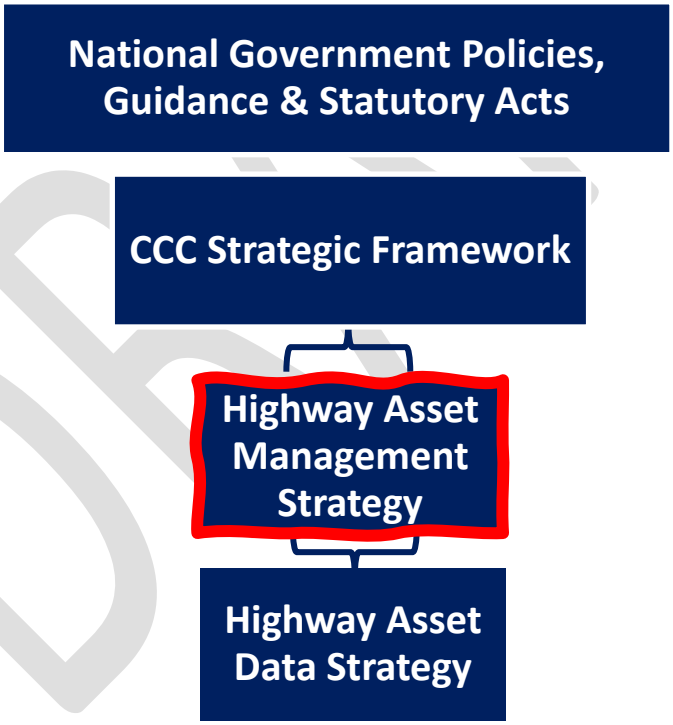
We can both positively and negatively influence the choices people make when it comes to using the highway network for travel, business, and leisure. We will deliver maintenance interventions which are well considered and timely for the communities in which they are situated.

**Ambition 6: Places and communities prosper because they have a resilient and inclusive economy, access to good quality public services and social justice is prioritised.**

We can enable access to public services and businesses through appropriate maintenance interventions, whilst also ensuring that our highway network is resilient and future proofed.

A properly maintained highway network is a key enabler for the transport of goods and passengers across the county and beyond. This is fundamental to the county developing and retaining a resilient economy.

The following illustrates how this Highway Asset Management Strategy (HAMS) fits in relation to the national and local plans and policies.




This document is the parent document to the Highway Asset Data Strategy (HADS). The HADS identifies how we will use asset data and systems to enable a data-led, preventative approach to asset management across our highway assets.

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# Assets not covered by this Strategy

This Strategy covers the management of key highway infrastructure assets. The Strategy 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 Strategy as detailed in the table below.

| Assets not covered by this Strategy | Responsibility |
|---|---|
| Guided Busway | CCC's Busway Operations and Health & Safety Teams |
| Street Lighting | Maintenance is covered by a PFI contract with Balfour Beatty.<br>In July 2011, a 25-year Private Finance Initiative (PFI) contract commenced between Cambridgeshire County Council and Balfour Beatty.<br>This PFI contract permits Balfour Beatty to carry out vital improvements and maintenance to County Council owned street lighting on behalf of Cambridgeshire County Council.<br>There are circa 60,000 streetlights and illuminated signs/bollards that are covered by the PFI contract. |
| Park and Ride Sites | CCC's Bus Operations Team |
| Car Parks | Multi storey and street level managed by either private company or District Council. |
| Street Name Plates | City/District Council |
| Picnic Site A10 Brandon Creek | CCC maintains barrier and cuts vegetation. |
| Bus Shelters | Parish Council except Drummer Street Bus Station, Cambridge which is managed within CCC's Bus Operations Team. |
| Pay and Display parking machines | CCC's Parking Operations Team |

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| | |
|---|---|
| • Motorways and Trunk Roads<br>• M11 – A11 to A14<br>• A11 – A14 to M11<br>• A428 – A14 to A1<br>• A14 – A11 to Boundary with Northamptonshire near Keyston<br>• A1(M) – A1 near Alconbury to Peterborough Boundary North of A15 Norman Cross<br>• A1 – A428 to A1(M) near Alconbury<br>• A47 – Norfolk Boundary near Emneth to Peterborough boundary near Thorney Toll | National Highways.<br>In Cambridgeshire there is approximately 400km of trunk road and motorway network managed by National Highways. |

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# Our Priorities and Principles

We are committed to improving the condition of Cambridgeshire's highways enabling better and safer journeys for those who live, work, or visit our county.

## Our priorities

We recognise that Cambridgeshire's residents care deeply about the condition of the highways network, and we are committed to delivering considered and timely highway maintenance activities and services to a high standard. To do this we have identified four key priority areas as follows.

### Continuous Improvement

The needs of our communities and demands on the highways network are constantly changing. It is important we keep looking into the future and planning. We are reviewing our existing highway contracts and services and looking ahead to how highway maintenance will be delivered in future. This could include changes to current intervention levels and defect repair response times.

### Community Focussed

We deliver highway maintenance services on behalf of residents. We are committed to ensuring services are rooted in communities and respond to local needs effectively and efficiently.

### Customer Experience

How we communicate is an important part of delivering a positive customer experience. Highway maintenance work can cause disruption, so we inform communities when work is taking place, via social media, digital maps and roadside signage. We are making progress on improving customer experience to make sure we communicate openly and transparently with everyone

### Value for Money

The amount of funding we have to spend each year is limited. How and where we spend the highways maintenance budget is important. We have processes to prioritise how we invest the highways maintenance budget in the most efficient and cost-effective way. Ensuring we maximise every pound we spend.

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## Our principles

To enable us to achieve these priorities we need to follow a consistent approach to managing our highway assets.

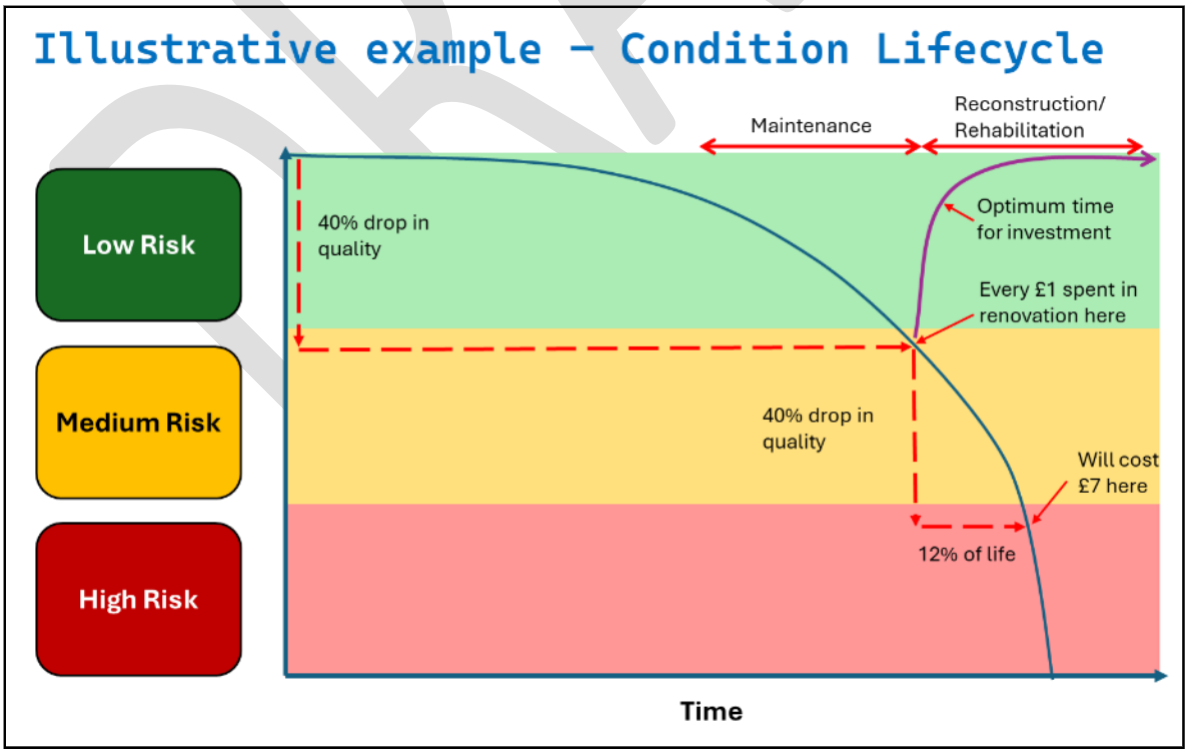
This Strategy sets out how Cambridgeshire County Council manages and maintains the highway infrastructure for which it is responsible.

This Strategy details how the principles of asset management are used to ensure that we meet the requirements of our users and deliver value for money.

We will do this by:

- Taking a preventative approach to maintaining our assets where this is appropriate by investing in maintenance at the optimum point in an assets lifecycle to maximise the return on that investment.
- Reducing inefficient and expensive short-term repairs where possible, recognising that potholes and other reactive maintenance repairs are a symptom, rather than the cure.
- Ensuring we are looking ahead and planning for the longer term through our investment approaches and programmes.
- Undertaking whole-life costing and lifecycle planning for all our assets to make best use of available funding, which is finite, and understand what this means for the future condition of each asset.
- Following an objective and data led approach to enable us to prioritise how and where we spend our money each year which is clear and accountable.

The infographic below demonstrates the benefits of following a preventative asset management approach where you intervene at a fixed point in an assets lifecycle before its condition deteriorates and intervention becomes cost prohibitive.

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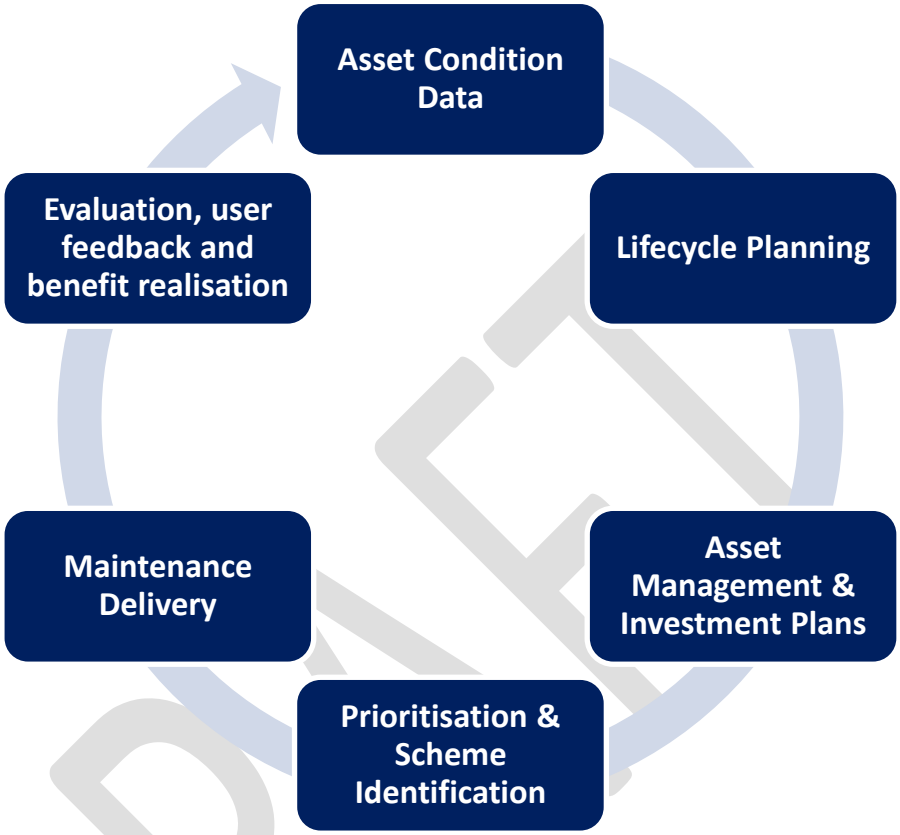
# Our approach

We will follow a consistent approach to managing our highway assets. This focuses on six key stages which officers will follow on an annual basis.




## Condition Data

We need to make informed and objective decisions about how and why we invest our budgets across our highway assets.

To enable this, we need accurate data on the condition our assets are in to identify how much we need to spend to either keep them in their existing condition or ensure they improve over a fixed period.

We have a Highway Asset Data Strategy which identifies in more detail how we collect asset data and why.

| Asset Type | Survey Technology Method | Description |
|---|---|---|
| Carriageway Condition | SCANNER | Vehicle-mounted sensors assess road surface condition (rutting, cracking, texture). |
| Highway Safety Defects | Route Reports | Uses AI and imagery analysis to detect safety defects based on investigatory levels. |
| Carriageway Skid Resistance | SCRIM | Measures road surface friction to assess skid resistance, especially in wet conditions. |
| Footway Condition | Footway Network Survey | Footway Network Survey – visual condition assessments of pavements. |
| Structures Condition | General & Principal Inspections | Regular visual inspections of bridges and other structures to assess safety and condition. |
| Traffic Signs | Gaist | AI/image-based assessment of sign condition and visibility using video or imagery. |
| Drainage Systems | KaarbonTech GullySMART | Tracks and manages gully (drain) conditions and cleaning schedules via software. |
| Trees | KaarbonTech TreeSMART | Survey and management system for tree condition, location, and risk. |
| Verges | KaarbonTech GrassSMART | Digital management of verge maintenance and grass cutting schedules. |
| Lines | Gaist | Visual condition assessment of line markings using image analysis. |

## Lifecycle Planning

A whole-life costing approach considers all the costs associated with the maintenance of an asset until it needs to be fully replaced.

Highway assets have life cycles that include the following phases:

- Creation/Acquisition
- Operation and maintenance
- Renewal, replacement or upgrade
- Operation and maintenance
- Disposal or Decommissioning

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

When developing the Council's Asset Management Strategy, lifecycle planning has been used to carefully consider different treatment options, their performance, and their impact upon the whole life cost of maintaining the assets.

Different levels of investment will have different impacts, and we have considered this and the implications carefully to identify a suitable investment approach for each asset. As we have a finite level of funding available each year, we have identified an approach which maximises this investment.

During this process several different 10-year investment scenarios have been produced and reviewed including:

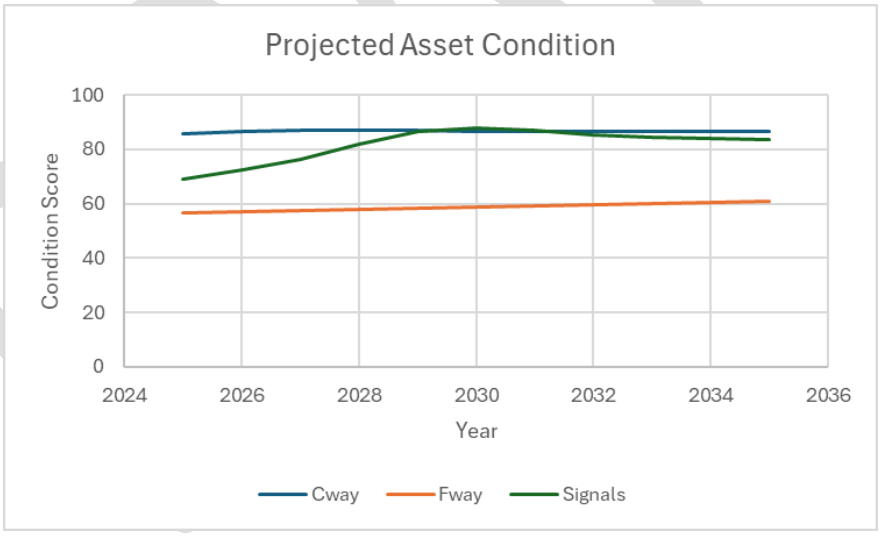
- The current level of investment and what this means for the asset.
- The steady state investment figure for that asset.
- The optimum investment level which is needed to improve that asset and enables as many different asset types as possible within the funding envelope available to be improved at the same time.

The following table provides a summary of what each approach means.

| Available approach | Meaning |
|---|---|
| **Preventative** | A preventative asset management strategy is adopted for carriageways and footways, investing a greater proportion of the available budget to treat assets in the early stages of deterioration as demonstrated in the above infographic.<br>A 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. |
| **Steady State** | Steady-state means keeping the overall condition of the highway assets stable (i.e. not improving or allowing them to deteriorate).<br>The steady state investment figure will change annually as the impact of the previous year's investment is reflected in updated asset condition data.<br>In order to calculate the amount of funding required to keep all highway assets in this stable condition, we use quantity, cost and treatment frequency data.<br>➢ The quantity is the volume of a particular highway asset i.e. area of road or pavement or the number of street lighting columns.<br>➢ The cost is the average cost for a particular maintenance treatment, calculated at a unit level i.e. cost per square metre for road surfacing or the cost for a street lighting column to be replaced.<br>➢ The treatment frequency is the length of time a particular maintenance treatment is expected to perform before a follow up treatment is needed. This can vary depending on a range of factors, |

| | |
|---|---|
| | for example a busy road with high levels of large heavy goods vehicles will need more frequent resurfacing treatments than those for a minor road serving a few domestic properties. |
| **Worst First** | A 'worst first' approach targets investment towards those assets that are at the end of their life and are in a poorer condition as shown in the 'High Risk' area above where each single intervention would be seven times as costly, reducing the amount of network that could be repaired annually and resulting in deteriorating asset condition if referring to carriageways.<br>This approach is appropriate where a preventative approach is not suitable. This could be the replacement of assets that you would expect to be working up until they fail, such as lighting units or electronic equipment where there is no benefit in intervening early. |
| **Risk Based** | A risk-based approach targets investment at those assets which have exceeded a set threshold based on a standardised risk assessment which is undertaken at regular fixed intervals.<br>This approach is reliant on accurate and well-maintained asset data. |

An example of what lifecycle planning means for several of our assets based on what we may invest in them over the next 10-year period is shown below for illustrative purposes only. Further detail is provided in the 'Managing our highway assets' section of this document.




A baseline 10-year investment strategy for all our assets covered in this Strategy is outlined below. This identifies the required average budgetary spend per year over a 10-year period to maintain all our assets in their current state. Any investment over and above this figure would improve the condition of the asset.

It is important to note that the actual amount which the County Council can invest each year is subject to both the amount of funding provided by national government and its own financial circumstances. It is therefore likely that the authority will have to prioritise where it invests the funding it has available to maximise the return on investment.

| Asset | Steady State Condition (where applicable) | Asset Management approach |
|---|---|---|
| Carriageways | £34,000,000 | Preventative |
| Footways & Cycleways | £ 4,000,000 | Preventative |
| Structures | £12,000,000 | Worst First |
| VRS | £ 750,000 | Worst First |
| Signals | £ 950,000 | Worst First |
| Intelligent Transport Systems | £ 167,000 | Worst First |
| Drainage | £ 3,000,000 | Risk based |
| Signs & posts | £ 750,000 | Risk based |
| Road markings | £ 750,000 | Risk based |
| Rights of Way | £ 500,000 | Not Applicable |
| Minor Maintenance Projects | £ 550,000 | Not Applicable |
| Asset Surveys | £ 750,000 | Not Applicable |
| **Total budget required** | **£58,167,000** | |

## Capital Highway Maintenance Prioritisation

Once the investment strategy has been agreed for each asset an annual prioritisation processes is used to identify capital funded highways maintenance schemes. Such schemes include the following:

- Structural carriageway maintenance
- Structural foot & cycleway maintenance
- Signals
- Structures
- Drainage projects (not including gully emptying)
- Rights of Way
- Vehicle Restraint Systems (VRS)
- Surface treatments including surface dressing on carriageways and slurry seal on paths and cycle routes.

It is not the intention that these processes be applied to revenue funded maintenance activities, which include reactive, routine, and cyclical activities, such as pothole repairs, grass cutting, and gully emptying for the following reasons:

- Pothole repairs and similar maintenance activities are assessed as issues arise. The budget is spent throughout the year, and repairs are prioritised based on risk categories as set out in the Highway Asset Management Strategy.

- Grass cutting is programmed as a countywide programme of work, and as a result would not be suited to a prioritisation process, i.e. all grass will be cut twice a year in accordance with the service standards set out in the Highway Asset Management Strategy.
- Weedkilling is programmed as a countywide programme of work with two sprays per year being undertaken across the county.

Gully emptying is programmed as a countywide programme of work, and as a result would not be suited to a prioritisation process, i.e. 100% of the known gully network is emptied/cleansed every two years. However, we aim to move to a more risk-based and asset management led approach once our whole gully network is mapped.

Whilst objective condition data is a key criterion by which officers will identify potential capital schemes, this is only one of many criteria. Elected Member, public observations and requests will help generate potential schemes, as do insurance claims and highway inspections by officers.

Whilst the resultant scores for each potential scheme are the primary arbiter for those that are included in the capital programme, special circumstances are considered in terms of network availability and co-ordination with other works. For instance, it might be that a scheme is promoted to year one of a programme, because there is alignment with another project which would enable both to be delivered together.

This allows us to produce a clear, prioritised pipeline of work for each asset type which is subject to the prioritisation process.

## Maintenance Delivery

Often identified work will fall into annualised programmes by asset type. Officers will then deliver via the most appropriate means which may be our Term Services Contract or the Eastern Highways Alliance Framework.

Delivery is always targeted as soon after budgetary approval as possible within the next budget year, however there are instances where projects or programmes will straddle several budget years based on complexity.

Where practicable work will be packaged in programmes to generate efficiencies and economies of scale with in-house teams leading on the majority of the pre-construction stages of these projects to retain control and accountability.

## Funding

The asset investment strategies outlined in this document are identified for each asset and assumes the following funding streams remain available:

- Annual LTP Capital Funding for Highways Maintenance
- Pothole Action Funding
- DfT Incentive Funding
- Additional revenue funding incorporated into the base budget.

Future usage and demands on the network will influence how successful we are in delivering this Strategy and they need to be assessed regularly, as they emerge, to facilitate the further development and formulation of these proposals for future funding.

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The main demands that could be influential, and will need to be monitored in future are:

- Asset Growth: New developments and growth within Cambridgeshire has and will continue to create additional highway assets that will require future maintenance.
- Traffic Growth: Traffic Growth in the county is monitored regularly and shows that the density of HGV traffic on Cambridgeshire's trunk 'A' roads is 3.7 times the national average, and on non-trunk main roads it is 56% above the national average.
- 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 for our Soil Affected Road network and presents further maintenance challenges given the increased loading these routes experience when compared to the rest of the country.
- Population Growth: Population in the county is forecast to increase by 18% over the next 19 years (Cambridgeshire Insight - population estimates). 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.
- Legislation Changes
- Changes in Technology
- Environmental Conditions: These are covered specifically within the Soil Affected Road and Environmental sections of this document.
- Local Government Reorganisation: changes to the size and extent of the network the authority is responsible for maintaining, and the funding it will have available to do so.

This Strategy has been developed based on information currently available to officers without incorporating future demands or inflationary cost increases which would need to be applied annually as part of the 10-year lifecycle planning process.

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# Our highway network

The highway network that Cambridgeshire is responsible for, including roads, footways, and cycleways, is detailed in the table below.

| Highway, footways, and cycleways type | Length in kilometres (km) |
|---|---|
| A Road (single and dual carriageways) | 517 |
| B and C Roads | 1,706 |
| U Roads | 2,296 |
| Total Roads | 4,519 |
| Footways (including 277km of footway not adjoining a road) | 2,710 |
| Other public rights of way | 3,256 |
| Cycleways | 41 |

The length of cycleway includes dedicated cycle tracks and other cycle paths but does not include the significant lengths of shared use footway/cycleways or marked cycle lanes within the carriageway throughout the County.

We also maintain the following highway assets to ensure people can travel through and around the County safely and efficiently.

| Quantity | Description |
|---|---|
| 1,200 | Road, pedestrian, and cycleway bridges |
| 2,200 | Public rights of way bridges |
| 85 | Other structures including underpasses/subways and retaining walls |
| 60,000 | Streetlights and illuminated signs/bollards |
| 145 | Zebra pedestrian crossings |
| 192 | Sets of traffic signalised junctions |
| 228 | Traffic light-controlled crossings |
| 112 | Electronic information and variable messaging signs and other traffic management assets |
| Over 115,000 | Drainage gullies, highway drains/sewers, soakaways, and other drainage infrastructure |
| 87,000 | Highway trees |
| 4,400km | Length of grass verges |
| Over 100km | Vehicle restraint systems and pedestrian guard rails |
| Over 7,000 | Public rights of ways assets including gates, stiles, and signs |

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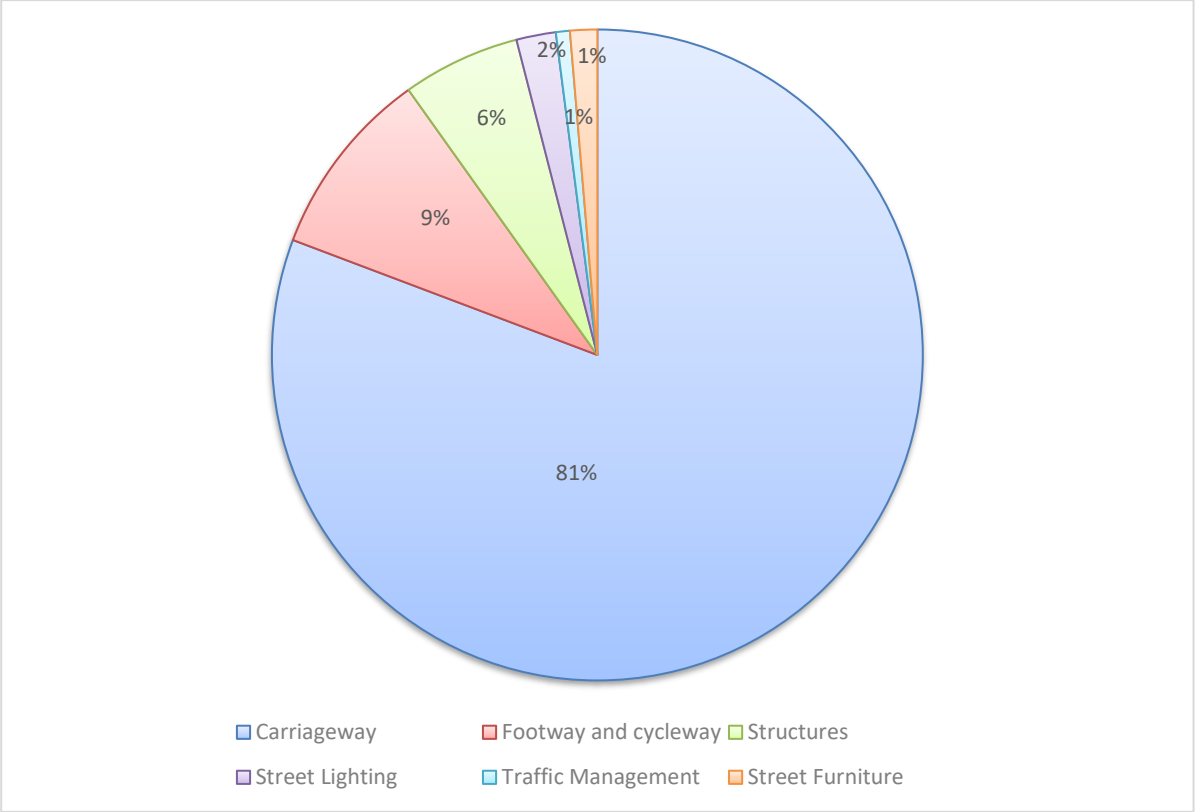
## Asset Valuation

CCC's Highway Assets are valued as follows as of August 2025.

| Asset | Gross Replacement Cost (GRC) £m |
|---|---|
| Carriageways | £6,129,000,000 |
| Footways and Cycleways | £ 714,000,000 |
| Structures | £ 444,000,000 |
| Street Lighting | £ 148,000,000 |
| Traffic Management (incl. Signals & ITS) | £ 52,000,000 |
| Street Furniture | £ 102,000,000 |
| **Total** | **£7,590,000,000** |



# Managing our highway assets

The following identifies our asset management approach specific to each of our asset types and provides further information on how we maintain and treat each individual asset we are responsible for.

## Carriageways

<table>
<tr><td>Description</td><td colspan="4">Carriageways (roads) are used primarily by vehicles and cyclists.<br>Our carriageway asset is the most valuable highway asset that we maintain.</td></tr>
<tr><td>Gross replacement Cost</td><td colspan="4">£6.129 billion as at July 2025</td></tr>
<tr><td>Quantity of asset</td><td colspan="4">4,518km as follows:<br>➢ A Roads – 517km<br>➢ B Roads – 582km<br>➢ C Roads – 1123km<br>➢ Unclassified Roads – 2296km</td></tr>
<tr><td rowspan="6">Condition measure</td><td></td><td>Green</td><td>Amber</td><td>Red</td></tr>
<tr><td>A Roads</td><td>74%</td><td>22%</td><td>4%</td></tr>
<tr><td>B Roads</td><td>66%</td><td>27%</td><td>7%</td></tr>
<tr><td>C Roads</td><td>61%</td><td>29%</td><td>10%</td></tr>
<tr><td>Unclassified Roads</td><td>59%</td><td>31%</td><td>10%</td></tr>
<tr><td>Cumulative</td><td>64%</td><td>28%</td><td>8%</td></tr>
<tr><td>Asset Management Strategy</td><td colspan="4">The Council manages the highway network with a focus on the most cost-effective long-term approach.<br>This is because the amount of funding we can spend each year is limited meaning how and where we spend our highways maintenance budget is important.<br>We have data led processes to prioritise how we invest the highways maintenance budget in the most efficient and cost-effective way, ensuring we maximise every pound spent.<br>We use a priorisation matrix to score all roads countywide which meet the agreed entry level condition threshold. These roads are then ranked and those which can be delivered within the funding available are identified.<br>This means intervening with a lower cost treatment earlier in an asset's lifecycle, to extend the life of the asset before it deteriorates to a stage where a much more expensive treatment is required.<br>This means we may have to prioritise roads for preventative treatments which are visually better condition than roads in a poorer visual or structural condition also requiring attention.</td></tr>
</table>

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| Asset Investment Strategy | Our investment strategy for carriageways will ensure that a preventative investment approach is followed which more than half of the allocated budget for carriageway maintenance each year being spent on preventative treatments. |
|---|---|

| Category | Hierarchy Description | Type of Road General Description | Description | CCC Inspection frequency and type | CCC Inspection frequency tolerance |
|---|---|---|---|---|---|
| **CW1** | Strategic Route | Principal 'A' class roads between Primary Destinations | The Primary Route Network | 12 times per year (monthly) - Driven | ± 7 calendar days |
| **CW2** | 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 | 12 times per year (monthly) - Driven. | ± 7 calendar days |
| **CW3*** | Secondary Distributor | Mostly B and C class roads and some unclassified routes typically carrying bus, HGV and local traffic. Might have frontage access and frequent junctions* | In residential and other built-up areas these roads have typically 20mph or 30mph speed limits and very high levels of pedestrian activity with some crossing facilities. On-street parking is generally unrestricted except for safety reasons. In rural areas these roads usually link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network | 12 times per year (monthly) - Driven. | ± 7 calendar days |

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| | | | | | |
|---|---|---|---|---|---|
| **CW4** | Link Road | Roads linking between the Main and Secondary Distributor Network typically with frontage access and frequent junctions | In urban areas these are residential or industrial roads connecting areas of development, typically with 20mph or 30mph speed limits, random pedestrian movements and uncontrolled parking. In rural areas these roads link the smaller villages to the distributor roads | 4 times a year (3 monthly) - Driven. | ± 14 calendar days |
| **CW5** | 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 properties and land. In urban areas they are often residential loop roads or cul-de-sacs | Annually (once per year) - Driven | ± 28 calendar days |
| **CW6** | 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 CW4 or CW5*

The safety inspection frequencies and methods identified are based upon the Code of Practice (CoP) "Well Managed Highway Infrastructure" which was published in October 2016, with some variations to reflect local circumstances.

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## Risk Assessments for Highway Safety Inspection

Risk Assessments for Highway Safety Inspections shall be carried out dynamically using the risk matrix below for each report/defect they encounter. This will be with reference to the relevant intervention level for that defect.

| | | Severity of Harm | | | |
|---|---|---|---|---|---|
| | | Minor | Moderate | Serious | Major |
| Likelihood | Inevitable | 4 | 8 | 12 | 16 |
| | More than likely | 3 | 6 | 9 | 12 |
| | Less than likely | 2 | 4 | 6 | 8 |
| | Unlikely | 1 | 2 | 3 | 4 |

Overall Risk Level guidance

| Score | Priority response | Action | Priority response time |
|---|---|---|---|
| 16 | Emergency | Attend/make safe | Emergency 2-hour response |
| 7-15 | Cat 1a | Make safe or permanent repair | Carriageway potholes – 5 calendar days<br>Non-carriageway potholes – 36 hours |
| 4-6 | Cat 1b | Permanent repair | Up to 21 calendar days |
| 1-3 | Cat 2 - Planned/ Preventative repair | Permanent repair | Monitor, or if the defect is at least 30mm deep, order and add defect repair to the preventative planned work programme, assessing delivery priority using the prioritisation matrix.<br>Up to 13 weeks |

Intervention levels for safety defects are in line with the risk-based approach as recommended in Well Maintained Highway Infrastructure: A Code of Practice.

| Item | | Defect | Investigatory Level | If risk assessed as Cat 1a | If risk assessed as Cat 1b |
|---|---|---|---|---|---|
| Carriageway | Strategic and Main Distributor Roads | Pothole/spalling/ depression/ sunken cover | 40mm depth (75mm across in any horizontal direction) | 5 days | 21 days |
| | | Gap/crack | 40mm depth (> 20mm width) | 5 days | 21 days |
| | | Ridge/hump | 40mm height | 5 days | 21 days |
| | Secondary Distributor Roads | Pothole/spalling/ depression/ sunken cover | 50mm depth (75mm across in any horizontal direction) | 5 days | 21 days |

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| | | | | | |
|---|---|---|---|---|---|
| | | Gap/crack | 50mm depth (> 20mm width) | 5 days | 21 days |
| | | Ridge/hump | 50mm height | 5 days | 21 days |
| Carriageway | Link and Local Access Roads | Pothole/spalling/ depression/ sunken cover | 50mm depth (75mm across in any horizontal direction) | 5 days | 21 days |
| | | Gap/crack | 50mm depth (> 20mm width) | 5 days | 21 days |
| | | Ridge/hump | 50mm height | 5 days | 21 days |
| Cycleway (when forming part of the carriageway) | Strategic and Main Distributor Roads | Pothole/spalling/ depression/ sunken cover | 40mm depth (75mm across in any horizontal direction) | 5 days | 21 days |
| | | Gap/crack | 40mm depth (> 20mm width) | 5 days | 21 days |
| | | Ridge/hump | 40mm height | 5 days | 21 days |
| | Secondary Distributor Roads | Pothole/spalling/ depression/ sunken cover | 50mm depth (75mm across in any horizontal direction) | 5 days | 21 days |
| | | Gap/crack | 50mm depth (> 20mm width) | 5 days | 21 days |
| | | Ridge/hump | 50mm height | 5 days | 21 days |
| | Link and Local Access Roads | Pothole/spalling/ depression/ sunken cover | 50mm depth (where metalled) (75mm across in any horizontal direction) | 5 days | 21 days |
| | | Gap/crack | 50mm depth (where metalled) (> 20mm width) | 5 days | 21 days |
| | | Ridge/hump | 50mm height (where metalled) | 5 days | 21 days |

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| | | | | | |
|---|---|---|---|---|---|
| **Carriageway** where the defect is within 3 metres of a controlled crossing point, or on a pedestrian desire line, or located within an area adjacent to a traffic calming feature where the road has been narrowed to a single running lane. | Strategic and Main Distributor Roads | Pothole/spalling/ Depression/ sunken cover | 25mm depth (75mm across in any horizontal direction) | 5 days | Defects all treated as Cat 1a only |
| | | Gap/crack | 25mm depth (> 20mm width) | 5 days | |
| | | Ridge/hump | 25mm height | 5 days | |
| | Secondary Distributor Roads | Pothole/spalling/ depression/ sunken cover | 25mm depth (75mm across in any horizontal direction) | 5 days | |
| | | Gap/crack | 25mm depth (> 20mm width) | 5 days | |
| | | Ridge/hump | 25mm height | 5 days | |
| | Link and Local Access Roads | Pothole/spalling/ depression/ sunken cover | 25mm depth (where metalled) (75mm across in any horizontal direction) | 5 days | |
| | | Gap/crack | 25mm depth (where metalled) (> 20mm width) | 5 days | |
| | | Ridge/hump | 25mm height (where metalled) | 5 days | |
| **Kerbs, Edging and Channels** | | Misaligned/ loose/rocking | 25mm horizontally/ vertically | 36 hours | 21 days |
| | | Missing | Missing kerb | 36 hours | 21 days |
| **Verges** | | Sunken area adjacent and running parallel with carriageway edge | 150mm depth and 5m longitudinal | 5 days | 21 days |

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| | | | | |
|---|---|---|---|---|
| **Iron works** | Gaps within framework (other than designed by manufacturer) causing a hazard | Present | 2 hours | NA |
| | Level differences within framework | 20mm | 36 hours | NA |
| | Rocking covers | 20mm | 36 hours | NA |
| | Cracked/broken covers | Not a Cat 1(1a or 1b) defect | NA | NA |
| | Worn/polished covers | Not a Cat 1 (1a or 1b) defect | NA | NA |
| | Missing covers | Missing | 2 hours | NA |
| All 2 hour make safe emergencies will be permanently repaired in 21 days<br>5 days = 5 calendar days | | | | |

## Response Timescales

Once assessed, if works are required then the following timescales are the current contractual response times from the date and time of the order.

| Type of defect/incident | Timescale | Response |
|---|---|---|
| Emergency incidents | Up to 2 hours | Attend/make safe |
| Cat 1* (1a and 1b) **excluding** carriageway potholes (urgent) | Cat 1a up to 36 hours<br>Cat 1b up to 21 calendar days | Make safe or repair |
| Cat 1* (1a and 1b) carriageway potholes (urgent) | Cat 1a up to 5 calendar days<br>Cat 1b up to 21 calendar days | Permanent repair |
| Cat 2 defects (planned) | Up to 13 weeks | Repair during next available programme |

** For Cat 1 repairs these are the target timeframes for defects to be repaired permanently, first time, however there are instances where completion in this timeframe may not be possible. Delays to completion could include other work happening in the area at that time, weather and complexity of the repair required.*

All infrastructure assets, i.e. carriageway, footway and cycle routes will in practice be inspected at the same time, to the highest frequency that has been set for any asset on that inspection route. As an example, if the carriageway is subject to a monthly inspection, and the footway is subject to an annual inspection, all assets will be inspected on a monthly basis. The highest inspection frequency is set against each street entry in the inspection management system.

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## How we will prioritise non-urgent reactive work

This approach relates to Cat 2 planned defects only. Cat 1 defects will be dealt with as they are assessed based on the intervention criteria outlined above.

For non-safety related defects, it is important that we have a standardised approach to prioritising these which is based on the level of risk the defect represents.

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.

The intervention levels support the preventative approach that is recommended and relies on the principles of 'right first time' being applied in a planned and effective way.

We will do this by scoring these defects and prioritising monthly for delivery. This ensures that we follow a consistent approach to how we spend our budgets.

Any scheme that achieves a score of 20 or above may be ordered. Any scheme not reaching the threshold shall not be ordered but will remain on the long list.

The final scores will be reviewed by a Senior Officer prior to ordering works to ensure this process has been applied consistently.

| Scoring categories | Scoring factors | Score | Definition |
|---|---|---|---|
| **Road Maintenance Hierarchy** | Strategic | 5 | Principal 'A' class roads between Primary Destinations. |
| | Main | 4 | Major Urban Network and Inter-Primary Links. |
| | Secondary | 3 | Mostly 'B' and 'C' class roads and some unclassified routes typically carrying bus, HGV and local traffic. Might have frontage access and frequent junctions*. |
| | Link | 2 | Roads linking between the Main and Secondary Distributor Network typically with frontage access and frequent junctions. |
| | Local other | 1 | Roads serving limited numbers of properties carrying only access traffic. |
| **Active Travel Hierarchy** | CY1, WW1-2 | 5 | CY1 - Prestige/busier commuter route - all cycle route provision including those metaled ROW where cycling is promoted.<br>Includes routes shown in categories 1 and 2 of the Cycling Hierarchy. WW1-2 Routes identified as most important for walkers and wheelers in Active Travel Hierarch. |
| | CY2, WW3-6 | 1 | Other routes for walkers and wheelers in Active Travel Hierarchy + Other routes - all cycle route provision. infrastructure including those metaled ROW where cycling is promoted.<br>Includes routes shown in categories 3 and 4 of the Cycling Hierarchy. |

| | | | |
|---|---|---|---|
| **Public Transport route** | Yes | 5 | Yes - bus service is available throughout the road or parts of it. |
| | No Bus Service | 1 | No Bus Service on the whole stretch of the road. |
| **Included on Resilient Network** | Yes | 5 | It is on the published Resilient Network, and so also includes routes which would be prioritised in the event of flooding or any other appropriate major incident. |
| | No | 1 | Not part of resilient network (as above). |
| **Anticipated rate of deterioration** | Rapid <6 months | 5 | It is predicted that the condition of the asset will deteriorate quickly causing significant concern and management issues. |
| | Slow >6 months | 1 | It is predicted that keeping the asset in safe/serviceable condition will be able to be managed by the Highways Maintenance team. |
| **Proximity to vulnerable users' facility** | High | 5 | Multiple facilities (two or over in proximity of the road) i.e. Adult Day Centres, Care Home, School or Shelter Housing sites. |
| | Medium | 3 | Single facility i.e. Adult Day Centres, Care Home, School or Shelter Housing sites. |
| | Low | 1 | No Facilities (as above). |

## How we deal with potholes efficiently

When ordering repairs for potholes on **Strategic, Main Distributor and Secondary Distributor roads**, the extents of the repair shall be as detailed in the diagrams below.

The repair of an individual pothole shall ensure that all defective road surfacing is within the marked area to be repaired.

In addition, any repair should also excavate any material to the nearest carriageway joint within 250mm.

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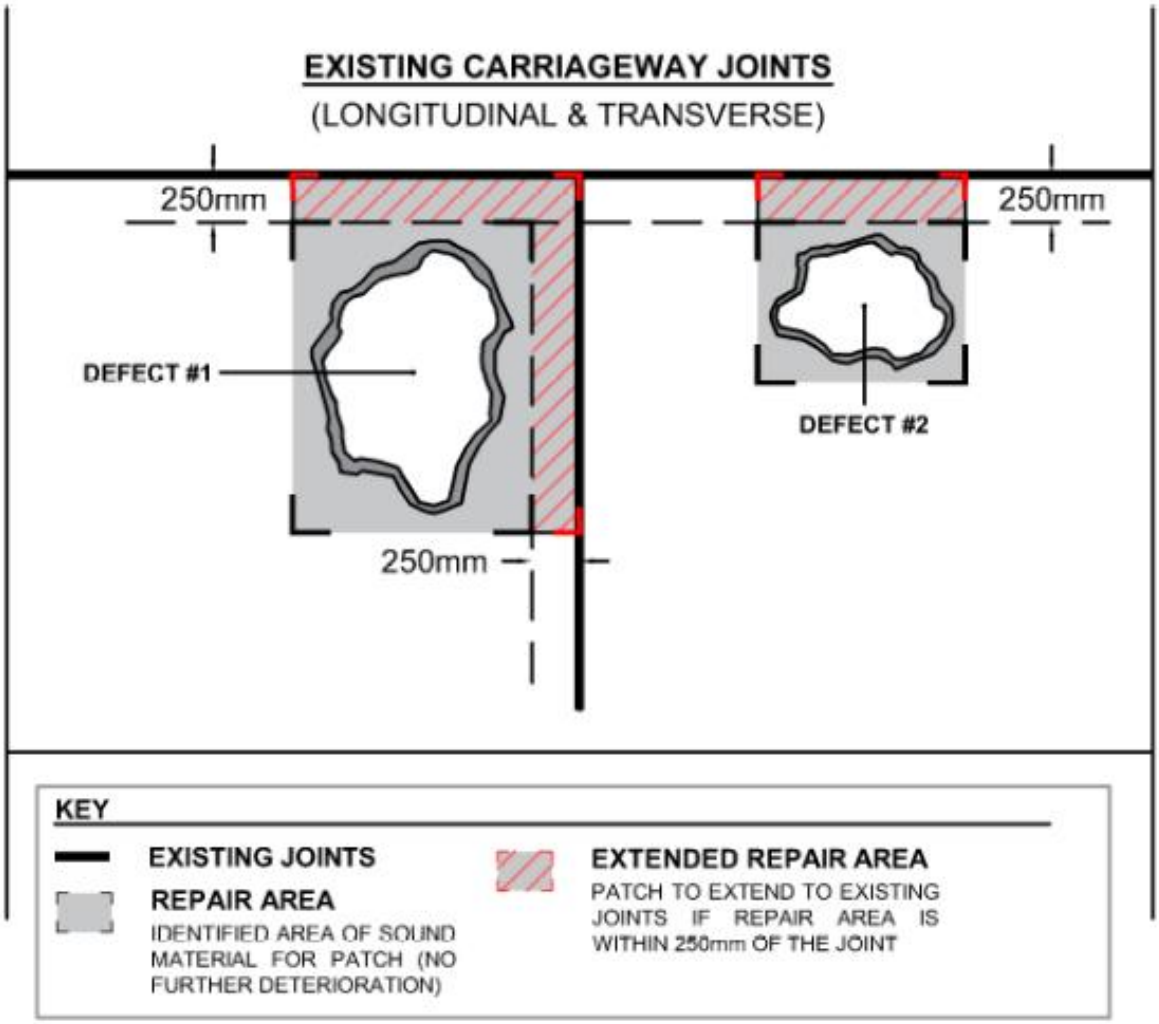
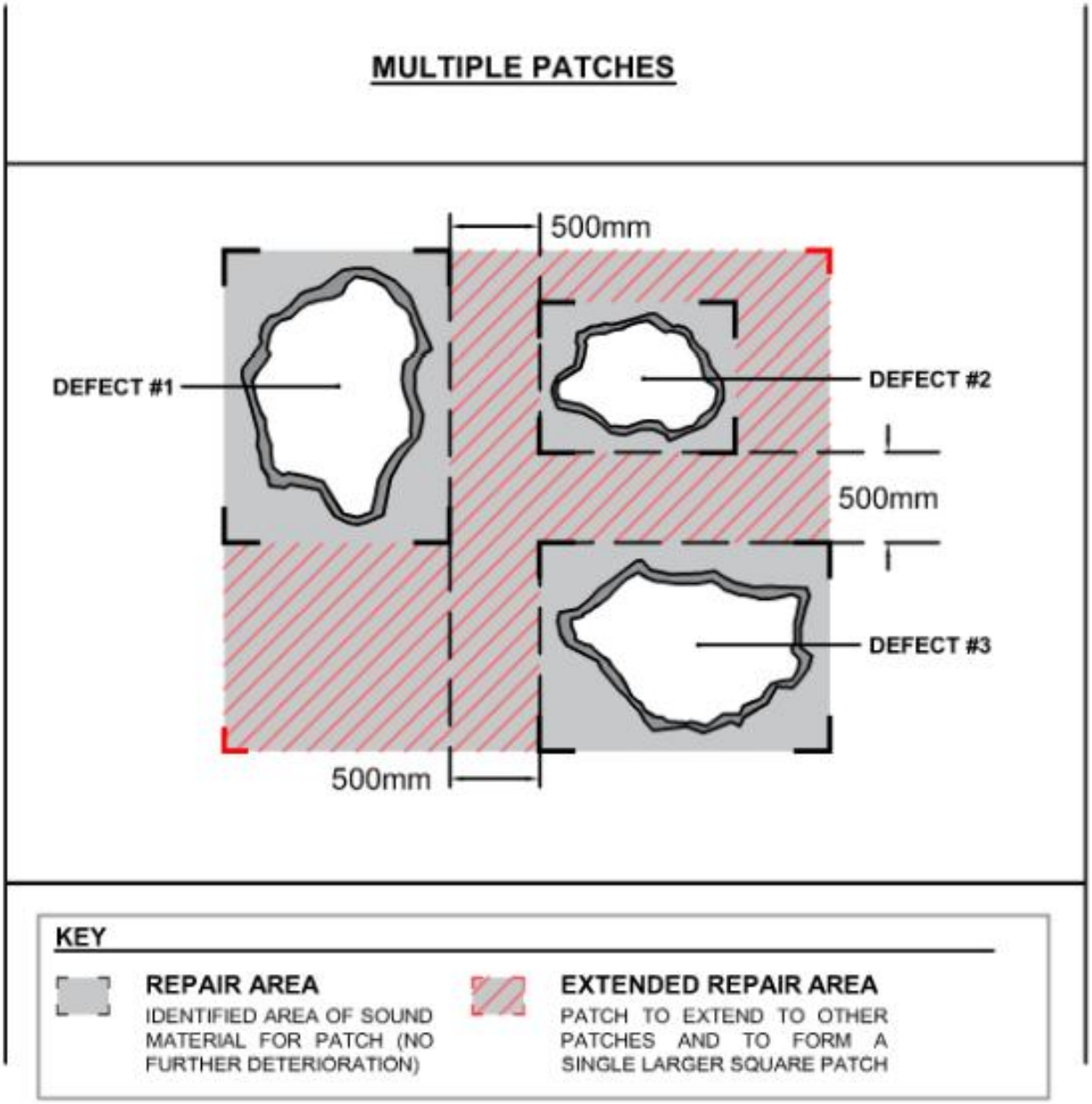



For all carriageway pothole repairs a standard repair specification will be used as follows:

| Repair Depth | Repair Specification | Notes |
|---|---|---|
| 50mm | 50mm thick Cambridgeshire Asphalt Surface Course (CASC) 50 | All repairs from 40mm or deeper should be excavated to a depth of 50mm, sawcut to a sound vertical joint and joints sealed with bitumen or tape. |
| 110mm | 50mm thick Cambridgeshire Asphalt Surface Course (CASC) 50<br>60mm thick Asphalt Concrete 20mm binder course 40/60pen | All repairs should be sawcut to a sound vertical joint and joints sealed with bitumen or tape. |
| 110mm+ | 50mm thick Cambridgeshire Asphalt Surface Course (CASC) 50<br>60mm + thickness Asphalt Concrete 20mm binder course 40/60pen | All repairs should be sawcut to a sound vertical joint and joints sealed with bitumen or tape. |

If there are several potholes within a 500mm distance of each other, then a single patch will be ordered to repair all the potholes within that are as detailed below. This will reduce the number of joints in the pavement and give the best possible chance for the reactive repair to succeed.




This approach applies to carriageways, cycleways and footways.

For all carriageway patching repairs a standard repair specification will be used as follows:

| Repair Depth | Repair Specification – Strategic & Main Routes | Repair Specification – All other routes | Notes |
|---|---|---|---|
| 50mm | 50mm thick **Cambridgeshire Asphalt Surface Course Plus (CASC+)** | 50mm thick Cambridgeshire Asphalt Surface Course (CASC) 50 | An increased specification of repair is used on more heavily trafficked routes to account for increased HGV movements. |
| 110mm | 50mm thick **Cambridgeshire Asphalt Surface Course Plus (CASC+)** 60mm thick Asphalt Concrete 20mm binder course 40/60pen | 50mm thick Cambridgeshire Asphalt Surface Course (CASC) 50 60mm thick Asphalt Concrete 20mm binder course 40/60pen | An increased specification of repair is used on more heavily trafficked routes to account for increased HGV movements. |
| 110mm + | 50mm thick **Cambridgeshire Asphalt Surface Course Plus (CASC+)** 60mm + thickness Asphalt Concrete 20mm binder course 40/60pen | 50mm thick Cambridgeshire Asphalt Surface Course (CASC) 50 60mm + thickness Asphalt Concrete 20mm binder course 40/60pen | An increased specification of repair is used on more heavily trafficked routes to account for increased HGV movements. |

## Equality Act 2010

When considering defects and repairs as a result of a request by or on the behalf of an individual with any of the protected characteristics as defined by the Equality Act 2010, where a faster or larger repair to a defect would have a positive impact for the individual, officers have the discretion to vary these standards.

## Soil Affected Roads (SARs)

Around 40% of Cambridgeshire's entire road network lies on peat-based soils. These soils naturally saturate and expand in wet weather and dry out and contract in dry weather. Climate change and unpredictable weather patterns can have a significant impact on these routes, resulting in excessive and accelerated deformation.

This is an issue that is unique to this region, with Cambridgeshire having a greater proportion of soil affected road network than other surrounding authorities.

As a result, a greater proportion of our funding goes on maintaining these routes, and this in turn impacts how much we can spend across the rest of our network. This is because the interventions required are more costly due to preventative treatments not being effective owing to the profile of the road.

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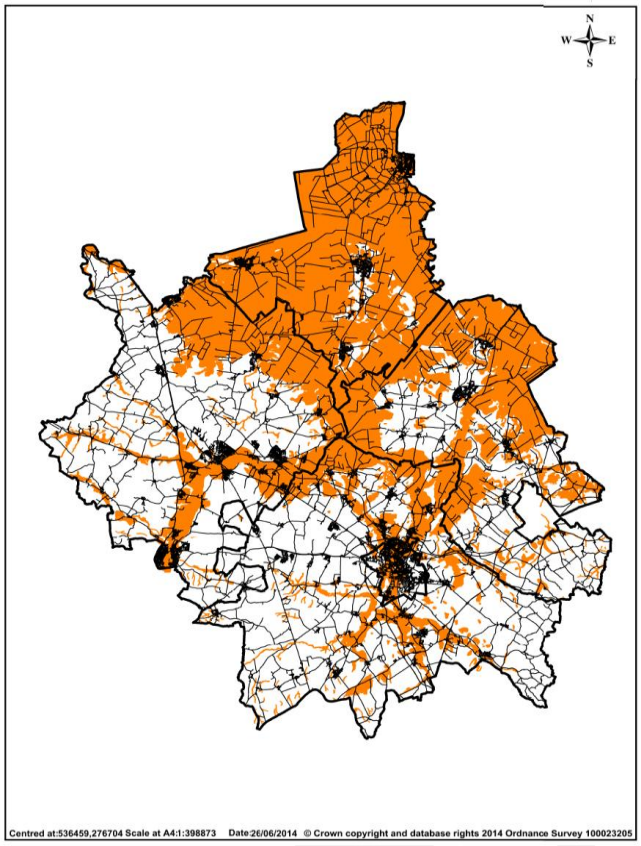
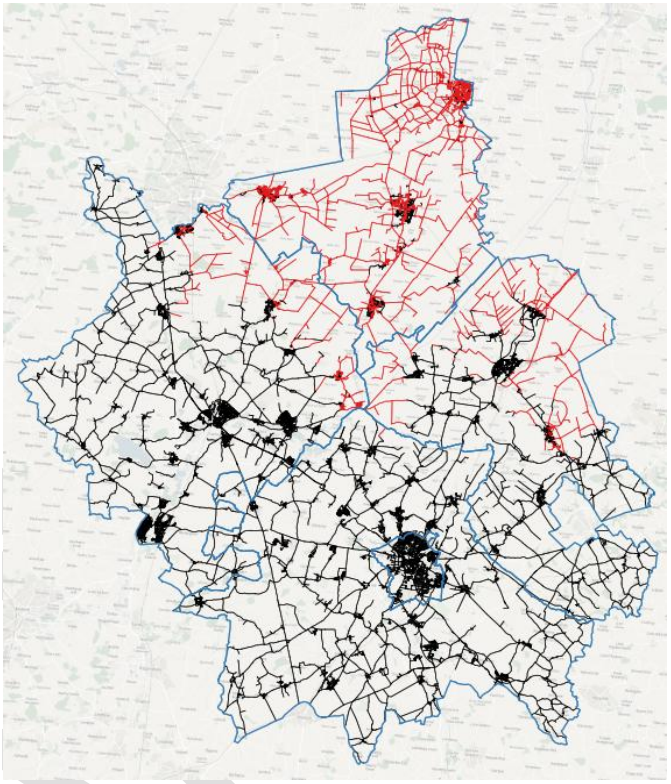
The extent of our soil affected road network is shown outlined below, first in orange, and then in red:



| Class of road | Total network length (km) | Susceptible roads by class (km) | Susceptible roads by class (%) | % of total road class affected |
|---|---|---|---|---|
| A | 480 | 147 | 9 | 31 |
| B | 578 | 251 | 15 | 44 |
| C | 1121 | 358 | 22 | 32 |
| U | 2244 | 906 | 54 | 40 |
| **Total** | **4423** | **1662** | **100** | **38** |

| District area | % of road that is soil affected |
|---|---|
| Cambridge | 0% |
| East Cambridgeshire | 28% |
| Fenland | 93% |
| Huntingdonshire | 15% |
| South Cambridgeshire | 0% |

A management regime based upon a risk-assessed approach is currently being applied to some routes, from the provision of warning signs to installing permanent traffic management, such as closing running lanes with traffic signals.

## How we manage Soil Affected Roads

The following guidance is in place for Highway officers to help manage the risk associated with SARs.

Where we have identified a carriageway that requires significant road reconstruction due to damage by drought, we will need to reconstruct the road to ensure the issue doesn't reoccur. Such work is outside the remit of Highway Officers, therefore where identified the below process is to be followed.

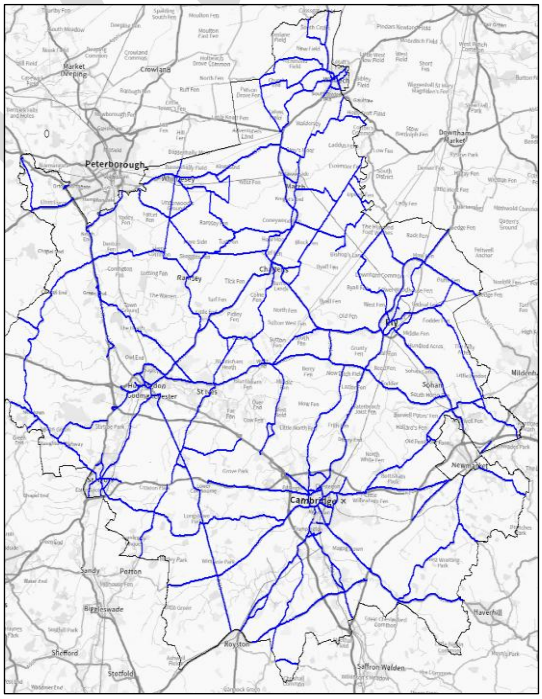
- Place metal A-frame Uneven Road/SLOW/RAMP/Slippery Road signs as appropriate on the approach to failed areas. These will be repeated dependant on site subject to the risk assessment undertaken by the Highways Officer.
- The temporary signs will be inspected once a week by the Highways Officer.
- A Road Safety review will be undertaken; this will assess the actions carried out so far. Consideration may be made regarding whether the existing speed limit is appropriate and if this needs to be reduced. If decreasing the speed limit is necessary, we will do this, and further temporary signs will be installed on site to advise as such.
- In some case we will also consider using some form of positive traffic management, this may be two-way traffic lights which will reduce the carriageway to one running lane to help drivers avoid dangerous defects. In extreme cases we may have to consider closing roads to through traffic.

## Resilient Road Network

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 Link Road, i.e. four times per year.

The roads on the resilient network countywide are identified in blue on the below map.



## Network Hierarchy

The formal maintenance hierarchy will be reviewed every three years, to reflect changes in the network characteristics and to ensure that the maintenance strategy reflects the current situation, rather than its use when the hierarchy was originally defined.

Any significant permanent changes in network usage that occur during the three years prior to the next formal review, due to new development or other changes may be considered independently.

## Road Classification Policy

Road classification in Great Britain helps to organise the road network in a logical and consistent way. It reflects the strategic importance of a road in moving people and goods, rather than how busy or wide the road is.

There are four main types of roads in the UK, excluding motorways. A-Roads are major routes that connect towns and cities. B-Roads link smaller areas and connect A-Roads to local roads. Classified Unnumbered Roads, often called C-Roads, are local connectors such as roads between villages or housing estates. Unclassified Roads are very local roads, such as residential streets or rural lanes.

Since April 2012, local highway authorities have been responsible for managing road classification and the Primary Route Network (PRN). They must ensure proper signage, consult neighbouring authorities and National Highways, keep records, and notify national bodies such as the Department for Transport (DfT) and Ordnance Survey. They must also be ready to explain their decisions if challenged. The Secretary of State retains the final legal authority and can intervene if necessary.

The PRN connects important places using designated routes. It must allow access for 40-tonne vehicles. Local authorities are responsible for selecting the routes, while the DfT decides which places are considered primary destinations.

Roads are classified based on their strategic role in the transport network. The classification should be consistent across local authority boundaries. Reclassification may be needed due to new roads, changes in traffic patterns, or to correct old inconsistencies.

The Asset Planning Team manages road classification decisions. They work with the Traffic Manager's Team, project managers, and local councillors. Major changes require approval from the Highways and Transport Committee. If changes affect other areas or the national road network, neighbouring authorities and National Highways must be consulted.

All changes to road classifications are reported monthly to the National Street Gazetteer. Relevant forms and maps are also sent to Geoplace, which forwards them to the DfT, Ordnance Survey, and other interested parties.

Changes to road classification do have a financial impact cost associated with them. Local authorities are responsible for all costs, including new signage and infrastructure upgrades if required. In certain cases, changing a road classification may result in a decrease in the level of funding provided by national government to the authority for road maintenance.

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## Footways and Cycleways

| | |
|---|---|
| **Description** | Footways (pavements) are primarily used by walkers and wheelers and are often shared use or segregated for use by cyclists.<br>This does not include the Public Rights of Way network, which is included separately below. |
| **Gross replacement Cost** | £714 million as at July 2025 |
| **Quantity of asset** | 2,710km of footways<br>41km of Cycle track/Cycle routes<br>This figure includes 277km of remote footways with the remainder being alongside the road.<br>This figure doesn't include the lengths of shared use footway/cycleways or marked (mandatory & advisory) cycle lanes within the carriageway of which there a significant length of throughout the County. |
| **Condition measure** | See table below for breakdown. |
| **Asset Management Strategy** | The Council manages the Footway and Cycleway network with a focus on the most cost-effective long-term approach.<br>This is because the amount of funding we can spend each year is limited meaning how and where we spend our highways maintenance budget is important.<br>We have data led processes to prioritise how we invest the highways maintenance budget in the most efficient and cost-effective way, ensuring we maximise every pound spent.<br>We use a priorisation matrix to score all roads countywide which meet the agreed entry level condition threshold. These roads are then ranked and those which can be delivered within the funding available are identified.<br>This means intervening with a lower-cost treatment earlier in an asset's lifecycle, to extend the life of the asset before it deteriorates to a stage where a much more expensive treatment is required.<br>This means we may have to prioritise routes for preventative treatments which are visually better condition than roads in a poorer visual or structural condition also requiring attention. |
| **Asset Investment Strategy** | Our investment strategy for footways will ensure that a preventative investment approach is followed which more than half of the allocated budget for footway maintenance each year being spent on preventative treatments. |

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The following table identifies the inspection frequency for our footway network.

| Category | Category Name | Description | CCC Inspection frequency and type | CCC Inspection frequency tolerance |
|---|---|---|---|---|
| WW1, WW2 | Walking and Wheeling Hierarchy categories 1 and 2 | Routes identified as most important for walkers and wheelers in Active Travel Hierarchy | 2 times per year (6 monthly) - walked inspection with associated carriageway inspected at same time | +/- 21 days |
| WW3, WW4, WW5, WW6 | Walking and Wheeling Hierarchy categories 3, 4, 5, 6 | Other routes for walkers and wheelers in Active Travel Hierarchy | Inspected according to position in Footway Hierarchy as outlined below | As below |
| FW1 | 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 |
| FW2 | 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 |
| FW3 | 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 |
| FW4 | Link Footways | Linking local access footways through urban areas and busy rural footways | Annually (once per year) - Driven with carriageway inspection | ± 28 calendar days |
| FW5 | 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 |
| FW6 | Minor Footways | Little used rural footways serving very limited numbers of properties | Annually (once per year) – Driven with carriageway inspection. | ± 28 calendar days |

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The following table identifies the inspection frequency for our cycleway network.

| Category | Description | CCC Inspection frequency and type | CCC Inspection frequency tolerance |
|---|---|---|---|
| CY1 | Prestige/busier commuter route - all cycle route provision including those metaled ROW where cycling is promoted.<br>Includes routes shown in categories 1 and 2 of the Cycling Hierarchy. | Twice per year (6 monthly – driven, cycled or walked) or inspected with footway/carriageway at same frequency and method. | ± 21 calendar days |
| CY2 | Other routes - all cycle route provision infrastructure including those metaled ROW where cycling is promoted.<br>Includes routes shown in categories 3 and 4 of the Cycling Hierarchy. | Annually (Once per year – driven, cycled or walked), or inspected with footway/carriageway at same frequency and method. | ± 28 calendar days |

## Risk Assessments for Highway Safety Inspection

Risk Assessments for Highway Safety Inspections shall be carried out dynamically using the risk matrix below for each report/defect they encounter. This will be with reference to the relevant intervention level for that defect.

| | | Severity of Harm | | | |
|---|---|---|---|---|---|
| | | Minor | Moderate | Serious | Major |
| Likelihood | Inevitable | 4 | 8 | 12 | 16 |
| | More than likely | 3 | 6 | 9 | 12 |
| | Less than likely | 2 | 4 | 6 | 8 |
| | Unlikely | 1 | 2 | 3 | 4 |

Overall Risk Level guidance

| Score | Priority response | Action | Priority response time |
|---|---|---|---|
| 16 | Emergency | Attend/make safe | Emergency 2 hour response |
| 7-15 | Cat 1a | Make safe or permanent repair | 36 hours |
| 4-6 | Cat 1b | Permanent repair | Up to 21 calendar days |
| 1-3 | Cat 2 - Planned/ Preventative repair | Permanent repair | Monitor, or if the defect is at least 15mm deep, order and add defect repair to the preventative planned work programme, assessing delivery priority using the prioritisation matrix.<br>Up to 13 weeks |

Intervention levels for safety defects are in line with the risk-based approach as recommended in Well Maintained Highway Infrastructure: A Code of Practice.

| Item | | Defect | Investigatory Level | If risk assessed as Cat 1a | If risk assessed as Cat 1b |
|---|---|---|---|---|---|
| **Footways and Cycleways** | Category WW1, WW2, FW1, FW2 Footways<br><br>Category CY1 Cycleways | Trip/pothole/ sunken cover | 25mm high/deep (75mm across in any horizontal direction) | 36 hours | 21 days |
| | | Rocking slab/ block | 25mm high/deep | 36 hours | 21 days |
| | | Gap/crack/ open joint | >20mm wide and >25mm deep | 36 hours | 21 days |
| | | Depression | >25mm deep and >600mm wide in any horizontal direction | 36 hours | 21 days |
| | All Other categories WW3, WW4, WW5, WW6, FW3 to FW6, CY2 | Trip/pothole/ sunken cover | 25mm high/deep (75mm across in any horizontal direction) | 36 hours | 21 days |
| | | Rocking slab/ block | 25mm high/deep | 36 hours | 21 days |
| | | Gap/crack/ open joint | >20mm wide and >25mm deep | 36 hours | 21 days |
| | | Depression | >25mm deep and >600mm wide in any horizontal direction | 36 hours | 21 days |
| **Kerbs, Edging and Channels** | Depression | Misaligned/ loose/rocking | 40mm horizontally/ vertically | 36 hours | 21 days |
| | | | Missing kerb | 36 hours | 21 days |
| **Verges** | Missing | Sunken area adjacent and running parallel with carriageway edge | 150mm depth and 5m longitudinal | 5 days | 21 days |
| | Ironworks | Missing cover or damaged cover | Yes | 2 hours | NA |

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| | | | | | |
|---|---|---|---|---|---|
| **Iron works** | Footway/ Cycleway | Gaps within framework (other than designed by manufacturer) causing a hazard | Present | 2 hours | NA |
| | | Level differences within framework | 20mm high/deep | 2 hours | NA |
| | | Rocking covers | 20mm high/deep | 2 hours | NA |
| | | Worn/polished covers | Present | 5 days | 21 days |
| | | Missing covers | Missing | 2 hours | NA |
| All 2 hours make safe emergencies will be permanently repaired in 28 days or as part of the next scheme.<br>5 days = 5 calendar days | | | | | |

Response timescales and approach is as per that outlined under the carriageway section above.

## How we will prioritise non-urgent reactive work

This approach relates to Cat 2 planned defects only. Cat 1 defects will be dealt with as they are assessed based on the intervention criteria outlined above.

For non-safety related defects, it is important that we have a standardised approach to prioritising these which is based on the level of risk the defect represents.

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.

The intervention levels support the preventative approach that is recommended and relies on the principles of 'right first time' being applied in a planned and effective way.

We will do this by scoring these defects and prioritising monthly for delivery. This ensures that we follow a consistent approach to how we spend our budgets.

Any scheme that achieves a score of 20 or above may be ordered. Any scheme not reaching the threshold shall not be ordered but will remain on the long list.

The final scores will be reviewed by a Senior Officer prior to ordering works to ensure this process has been applied consistently.

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| Scoring categories | Scoring factors | Score | Definition |
|---|---|---|---|
| **Active Travel Hierarchy** | CY1, WW1-2 | 5 | CY1 - Prestige/busier commuter route - all cycle route provision including those metaled ROW where cycling is promoted.<br>Includes routes shown in categories 1 and 2 of the Cycling Hierarchy. WW1-2 Routes identified as most important for walkers and wheelers in Active Travel Hierarch. |
| | CY2, WW3-6 | 1 | Other routes for walkers and wheelers in Active Travel Hierarchy + Other routes - all cycle route provision. infrastructure including those metaled ROW where cycling is promoted.<br>Includes routes shown in categories 3 and 4 of the Cycling Hierarchy. |
| **Access to public transport in the area** | Yes | 5 | Yes - bus service is available throughout the road or parts of it. |
| | No Bus Service | 1 | No Bus Service on the whole stretch of the road. |
| **Access to local amenities** | Yes | 5 | High Concentration of areas of interest i.e. School/Hospital/Rail Station, etc |
| | No | 1 | Low concentration - Singe point of interest - i.e. School/Hospital/Rail Station, etc |
| **Anticipated rate of deterioration** | Rapid <6 months | 5 | It is predicted that the condition of the asset will deteriorate quickly causing significant concern and management issues. |
| | Slow >6 months | 1 | It is predicted that keeping the asset in safe/serviceable condition will be able to be managed by the Highways Maintenance Team. |
| **Proximity to vulnerable users' facility** | High | 5 | Multiple facilities (two or over in proximity of the road) i.e. Adult Day Centres, Care Home, School or Shelter Housing sites. |
| | Medium | 3 | Single facility i.e. Adult Day Centres, Care Home, School or Shelter Housing sites. |
| | Low | 1 | No Facilities (as above). |

## How we deal with potholes efficiently

Where two or more defects at or exceeding 15mm in depth exist within a one metre length of footway, a repair shall be carried out as planned works, within 13 weeks.

The repair of an individual defect shall ensure that all defective footway surfacing is within the marked area to be repaired.

## Equality Act 2010

When considering defects and repairs as a result of a request by or on the behalf of an individual with any of the protected characteristics as defined by the Equality Act 2010, where a faster or larger repair to a defect would have a positive impact for the individual, officers have the discretion to vary these standards.

## The Active Travel Hierarchy

We have developed an Active Travel Hierarchy to recognise the importance of walking, wheeling, and cycling. Specific Active Travel Hierarchies are not in widespread use by local Highways Authorities for maintenance activities and Cambridgeshire is an early adopter of their use to support Active Travel.

Our Active Travel Network will help ensure that the County's highways are maintained with due regard to the needs of active travel and non-motorised users of the network. As an example, the Hierarchy will be used to support prioritisation of capital maintenance schemes by assigning ranked scores to routes that are placed higher in the Hierarchy. This will build on the adoption of Cambridgeshire's Active Travel Strategy

The Active Travel Hierarchy ranks all highways in Cambridgeshire according to their importance to walkers, wheelers (users of mobility aids) and cyclists. There is a Walking and Wheeling (WW) Hierarchy with six categories and a Cycling (CY) Hierarchy with four.

These hierarchies enable us to target our maintenance activities to support active travel by ensuring that we can prioritise maintenance on the most important routes. The highest-ranked active travel routes are in many cases the same routes as our priority carriageways, footways or cycleways. These routes will be inspected according to their position on the existing hierarchies.

Priority active travel routes will be inspected on a six-monthly basis, as shown in the tables above.

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# Drainage

| | |
|---|---|
| **Description** | This includes all highway drainage assets. |
| **Gross replacement Cost** | Included in Carriageway Valuation. |
| **Quantity of asset** | Not fully recorded – see below. |
| **Condition** | Not measured. |
| **Asset Management Strategy** | Gullies and soakaways are emptied as part of a routine cyclical programme which covers 100% of known inventory items countywide every two years.<br>The authority has an annual grip programme, with drainage grips being cut before winter each year.<br>Reactive issues are addressed as they arise and if budget allows.<br>Drainage projects such as increasing the capacity of an existing system or installing a new system are prioritised for delivery each year as they are investigated and confirmed. |
| **Asset Investment Strategy** | The investment we will make per year means the authority will be able to follow a risk-based approach to managing gully emptying countywide and deliver more complex maintenance projects to existing systems where issues are identified.<br>The funding for this work will be split across both revenue and capital sources. |

## Drainage interventions

Risk Assessments for Highway Safety Inspections shall be carried out dynamically using the risk matrix below for each report/defect they encounter. This will be with reference to the relevant intervention level for that defect.

| Item | Defect | Investigatory Level | If risk assessed as Cat 1a | If risk assessed as Cat 1b |
|---|---|---|---|---|
| **Flooding** | Standing water 2 hours after cessation of rainfall which inhibits the free flow of traffic | Emergency order if leading to network restrictions/safety concerns – warning signs/ other mitigation deployed | 2 hours | NA |
| | Substantial running water across carriageway/footway | Emergency order if leading to network restrictions/safety concerns – warning signs/ other mitigation deployed | 2 hours | NA |
| **Drainage** | Blocked gully (silted above outlet) | Yes, if leading to network restrictions/safety concerns or risk to property, otherwise Cat 1b | 2 hours | 21 day - if risk assessed as non - emergency |

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|---|---|---|---|---|
| **Drainage** | Collapsed/blocked/ settled items or systems | Yes, if leading to network restrictions/safety concerns, otherwise Cat 1b | 2 hours | 21 day - if risk assessed as non - emergency |

Our highway drainage records are known to be incomplete, as records have not historically been collated and recorded. In recent years any records that are available have been digitised. However, this remains as an incomplete data set for now.

The cost of collecting underground drainage inventory is significant, and it is accepted that this data set will be developed over time, concentrating on areas where flooding issues occur.

The highway drainage assets we currently have recorded are detailed below.

| | |
|---|---|
| **Gullies** | 105,000 (plus assumed 20% more) |
| **Gully connections (the pipe from the gully to the main surface water sewer)** | 300km |
| **Kerb offlets** | 7,100 |
| **Linear drainage** | To be confirmed |
| **Slot drains/Beany Blocks** | To be confirmed |
| **Permeable paving** | To be confirmed |
| **Catchpits** | 1,000 |
| **Manholes** | 12,108 |
| **Highway SW drains** | To be confirmed |
| **Highways culvert (<900mm)** | 103 |
| **Ditches** | 38 |
| **Swales** | To be confirmed |
| **Rain gardens** | To be confirmed |
| **Headwall** | 251 |
| **Soakaways** | 1,137 |
| **Balancing ponds/attenuation ponds** | 43 |
| **Attenuation tanks** | 1 |
| **French drains** | 93.42 km |
| **Highway surface water pumping station** | 13 |
| **Wetlands** | To be confirmed |
| **Petrol interceptors** | 8 |
| **Grips in verges** | c. 15,000 cut annually |

## Cyclical Asset Management Approach

Gullies and soakaways are emptied as part of a routine cyclical programme which covers 100% of known inventory items countywide every two years.

Where any gullies are missed due to parked cars or other obstructions, a return visit/s shall be scheduled to ensure the gullies are attended to in that cyclical period. This will be undertaken at the end of the programme to allow officers to plan how this can be done without further issues.

Where defective or damaged gully infrastructure is identified, this will be reported to the reactive area team who will prioritise and arrange repairs in line with the intervention criteria set out above.

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## Structures

| | |
|---|---|
| **Description** | This includes any highway owned bridge, culvert, subway, or other structure built over, under, or adjacent to a highway that significantly affects its support or the safety of road users. |
| **Gross replacement Cost** | £444 million as at July 2025 |
| **Quantity of asset** | 1,200 road, pedestrian & cycleway bridges<br>2,200 Public rights of way bridges<br>85 other structures including underpasses, subways and retaining walls. |
| **Condition measures** | BSCI*av* – Average condition of the structures stock<br>BSCI*crit* – Critical condition of the structures stock |
| **Asset Management Strategy** | Structures assets will be maintained based on need, within the budgets available. In effect, the assets in the worst condition will be dealt with first.<br>Part of our forward programme of work is developed from existing condition data and will be prioritised accordingly for delivery on an annual basis.<br>Part is semi-reactive dependent upon the latest in year inspection data for critical and reactive repairs. This will be managed dynamically by officers.<br>Where a structure requires unanticipated additional investment over and above the available allocation this will be managed by exception when identified. |
| **Asset Investment Strategy** | Our average investment per year over ten years means the authority will be able to follow a worst first approach to managing structures countywide whilst keeping the average structural condition, (BSClav), in the 'Fair' condition category.<br>Where an issue does emerge which requires one-off funding to rectify over and above routine budgets allocated, we will treat this by exception. |

### Structures Inspection frequencies

We undertake two types of routine inspections on our structures stock that feeds into the generation of the BCSI above.

- General Inspection (GI) – This is a general inspection of all structures every two years.
- Principal Inspection (PI) – This is undertaken every six years on structures with technical issues/difficulties.
- Where applicable we will reduce the inspection frequencies mentioned above following a risk assessment process.

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The condition banding for the Bridge Condition Index is shown in the table below.

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

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## Vehicle Restraint Systems (VRS), and Pedestrian Guardrails

| | |
|---|---|
| **Description** | Often referred as safety barriers, this is designed to prevent vehicles from leaving the road and hitting roadside hazards. |
| **Gross replacement Cost** | £28,542,000 as at July 2025 |
| **Quantity of asset** | VRS length 124 km<br>Pedestrian Guardrail length 10.85km |
| **Condition measure** | Not currently reported. |
| **Asset Management Strategy** | In prioritisation of planned works to safety barriers, an assessment of the level of risk to road users is considered based on the following:<br>➢ The categorisation of the road within the maintenance hierarchy.<br>➢ What the safety barrier is protecting and the road environment of the safety barrier.<br>➢ The existing collision history of the road.<br>➢ This will provide a ranked list include Red, Amber and Green VRS countywide for officers to then prioritise for delivery. |
| **Asset Investment Strategy** | Our average investment per year over a ten-year period means that we will be maintaining all assets in an amber risk condition or better and addressing all issues that have been risk assessed by us as red as and when they are identified. |

### VRS Inspection frequencies

There are two types of formal inspection required relating to the VRS asset and one visual check:

| Type of Inspection | What's included | Inspection interval | Tolerance |
|---|---|---|---|
| Re-tensioning inspection | This inspection requires the tensioning bolts on steel VRS to be checked and reset to the correct torque. The inspection will also check on the integrity of beams and mounting heights of the tensioned VRS. | 3 Years | +/- 1 month |
| Visual condition | An annual programme of inspections to cover all VRS assets over a five-year period. No more than five-year period between surveys on an individual asset | 5 Years | +/- 1 month |

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## Visual check

Officers will carry out visual checks to make sure that highway assets are in a safe condition as part of their routine safety inspections.

This includes a coarse visual assessment ensuring that safety barrier components are not obviously broken or damaged.

These inspections are carried out at intervals determined by the network hierarchy of the road as defined in the carriageways section of this document.

Where any VRS has been assessed as high risk, an assessment will be made to ascertain if more regular formal inspections and/or checks are required to supplement the routine inspections identified above.

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## Traffic Signals

| | |
|---|---|
| **Description** | Includes traffic signal installations, including junctions and controlled crossings. |
| **Gross replacement Cost** | £47 million as at July 2025 |
| **Quantity of asset** | 192 sets of traffic signalised junctions<br>228 traffic light-controlled crossings |
| **Condition measure** | Average Stock Age: 14.30 years |
| **Asset Management Strategy** | Traffic signals are maintained on a worst first basis based on a maximum desired 20-year life.<br>The actual design life of signals infrastructure is 15 years; however, we look to maintain to a 20-year life to sweat the maximum lifecycle from this asset. |
| **Investment Strategy** | All our signals' assets will be replaced at or before the 20-year point. |
| **Development Plan** | Develop a data-based condition score |

### Safety inspection of traffic signals

Periodic inspections (PI's) are carried out on the signal's infrastructure. The physical condition of the site is checked visually, together with safety testing all of the electronic signal and communications equipment once per year.

Traffic signals are maintained through a combination of planned and reactive maintenance strategies.

- Planned maintenance is guided by a scoring system that considers several key factors, including asset condition, obsolescence, support for active travel, carbon footprint, and age.
- Reactive maintenance also plays a vital role in extending the lifespan of traffic signal assets. It enables timely responses to issues, helping to prevent safety hazards and service disruptions.

The traffic signal infrastructure faces additional pressures, such as the global decline in availability of halogen lamps, increasing demand to upgrade sites to energy-efficient LED technology, and the growing challenge of maintaining outdated signal control equipment due to obsolescence.

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## Intelligent Transport Systems (ITS)

| | |
|---|---|
| **Description** | Traffic Management systems manage real time travel information to local residents, businesses and communities. |
| **Gross replacement Cost** | £4.5 million as at July 2025 |
| **Quantity of asset** | 112 electronic information and variable messaging signs and other traffic management assets |
| **Condition measure** | Average Stock Age: 16 years |
| **Asset Management Strategy** | This asset will be maintained on the basis of need, with those assets in worst condition being treated first. |
| **Investment Strategy** | Capital Investment figure - £162,000. This will enable us to to maintain all Intelligent Transport Systems.<br>This follows a £500,000 investment in the Variable Message Signs inventory countywide in 2025. |

### Inspection frequencies

Yearly inspections are carried out by our contractors, and the back-office system makes the team aware of any faults in real time.

All ITS are maintained through a combination of planned and reactive maintenance strategies.

Planned maintenance is guided by several key factors, including asset condition, obsolescence, support for active travel, carbon footprint, and age. Proactive and reactive maintenance also plays a vital role in extending the lifespan of all our assets.

The table below identifies the ITS equipment used to manage the network.

| Intelligent Transport System asset | Quantity |
|---|---|
| Variable Message Signs including mobile | 49 |
| Parking Guidance Signs | 18 |
| Park & Ride Parking Guidance Signs | 9 |
| Rising Bollards | 2 |
| Electronic Flooding Signs | 9 |
| CCTV Cameras for Live Traffic Monitoring | 25 |

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## Traffic Signs and Posts

| | |
|---|---|
| **Description** | This includes all non-illuminated traffic signs and the posts that they are fixed to. |
| **Gross replacement Cost** | £53 million |
| **Quantity of asset** | 72,177 traffic signs and associated posts |
| **Condition measure** | ➢ Band 1 (good condition) – 62,121 (86%)<br>➢ Band 2 (average condition) – 7,296 (10%)<br>➢ Band 3 (poor condition) – 2,760 (4%) |
| **Asset Management Strategy** | This asset will be maintained on the basis of need, with those assets in worst condition being treated first.<br>A full sign inventory was collected in June 2024 which has enabled us to develop this approach. |
| **Investment Strategy** | Our strategy identifies a yearly investment figure for proactive planned maintenance, in addition to revenue funding, spread over a 10-year period to maintain all signs in condition Bands 1 & 2. |

### Inspection frequencies

Traffic signs and posts form part of the existing inspection regime as safety critical infrastructure.

These inspections should inform Highways officers of any requirements, and they should consider the different road sign classifications when prioritising work for delivery.

The following table identifies how signs will be prioritised for maintenance and intervention by officers

| Priority interventions | Network Hierarchy | Type of Sign | Response time |
|---|---|---|---|
| Priority 1 | Strategic and Main distributor roads | Regulatory and Warning Signs | Cat 1a (36 hours) – Make safe or install temporary sign where appropriate.<br>Cat 1b (21 days) – Installation of replacement sign |
| Priority 2 | All other roads | Regulatory and Warning Signs | Cat 1a (36 hours) – Make safe or install temporary sign where appropriate.<br>Cat 1b (21 days) – Installation of replacement sign |
| Priority 3 | Strategic and Main distributor roads | All other signs | Cat 2 (13 weeks) – Installation of replacement sign. |
| Priority 4 | All other roads | All other signs | Cat 2 (13 weeks) – Installation of replacement sign. |

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## Road Markings

| | |
|---|---|
| **Description** | This includes road markings and road studs across our road network. |
| **Gross replacement Cost** | Included in our 'carriageway asset' valuation. |
| **Quantity of asset** | 3,400 km of road markings<br>90,000 road studs (estimated) |
| **Condition measure** | Not measured |
| **Asset Management Strategy** | This asset will be maintained based on need, with those assets in worst condition being treated first.<br>Intervention is prioritised based on network hierarchy and road classification. |
| **Investment Strategy** | Our strategy identifies a yearly investment figure for proactive planned maintenance, in addition to revenue funding, spread over a 10-year period to maintain all markings. |

### Inspection frequencies

Road marking and Studs shall form part of the existing carriageway inspection regime as safety critical infrastructure.

These inspections inform Highways officers of any requirements, and they should consider the cyclical issues of road marking installations with regard to winter weather restrictions on lining replacement.

### General rules for road classifications

| Class | Centre Line | Edge Line | Road Studs |
|---|---|---|---|
| A | Yes, with warning lines where appropriate | Yes, on high-speed sections except alongside kerbed sections and inside 30mph speed limits. | Yes, except in street lit areas or inside 30mph limits. |
| B | Yes, where the carriageway width typically exceeds 5.5m and with warning lines where appropriate. | Only on consistently high traffic flow routes (typically >6000 vehicles in 12 hours) or at specific hazard locations (e.g.: 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. |

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| | | | |
|---|---|---|---|
| C | Only on consistently high traffic flow routes (typically >2000 vehicles in 12 hours) where carriageway width typically exceeds 5.5m.<br>Warning lines at specific hazard locations (e.g.: junctions and bends). | Only at specific hazard locations (e.g.: 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 except warning lines at specific hazard locations (e.g.: junctions and bends). | No markings except at specific hazard locations (e.g.: 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. |

## Assessment process for roadmarkings

The following table identifies how road markings and studs will be prioritised for maintenance and intervention by officers

| Priority interventions | Network Hierarchy | Type of Sign | Response time |
|---|---|---|---|
| **Priority 1** | Strategic and Main distributor roads | Junction & regulatory road markings | Cat 1a (5 days) – Replace non-existent or barely visible road markings.<br>  <br>  |

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| | | | |
|---|---|---|---|
| **Priority 2** | Strategic and Main distributor roads | All other road markings | Cat 1b (21 days) – Replace visible or marginal road markings.<br>  <br>  |
| **Priority 3** | All other roads | Junction & regulatory road markings | Cat 1b (21 days) – Replace non-existent or barely visible road markings.<br>  <br>  |

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| | | | |
|---|---|---|---|
| **Priority 4** | All other roads | All other road markings | Cat 2 (13 weeks) – Replace visible or marginal road markings.   |

Where minor patching repairs are undertaken which require the removal of road markings, these markings should be replaced within the timeframes identified above as part of that work.

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## Public Rights of Way (PROW)

| | |
|---|---|
| **Description** | A PROW is a route where the public has a legally protected right to pass and repass, typically over land.<br>These routes are classified according to the type of use permitted and form part of the public highway. |
| **Gross replacement Cost** | Not available |
| **Quantity of asset** | 3256km of PROW – see breakdown below.<br>Over 7,000 PROW assets including gates, stiles and signs |
| **Condition measure** | Not collected |
| **Asset Management Strategy** | PROW are mostly maintained on a reactive basis, either identified through ROW officers on site or by reports from members of the public.<br>Key routes are inspected yearly and maintained proactively.<br>These priority routes have been identified and defined as part of our Active Travel Hierarchy. |
| **Asset Investment Plan** | This will enable us to undertake proactive maintenance and inspections on priority routes.<br>The remainder of PROW maintenance work is funded out of revenue. |

**The Public Right of Way network**

| | |
|---|---|
| *Public Footpaths* (routes that are open to use by pedestrians) | 2,235km |
| *Bridleways* (routes open to use by pedestrians, cyclists and horse riders) | 608km |
| *Restricted Byways* (routes open to use by all of the above and also non-motorised vehicles such as horse-drawn carriages) | 4km |
| *Byways Open to All Traffic* (routes open to use by all of the above and also motorised vehicles, although in practice these are often unsurfaced routes which may be inaccessible to ordinary motor traffic) | 409km |

The significant majority of PROW are maintainable at public expense by the Council. Whether or not a path is maintainable by the Council, we have a duty to ensure that all PROW are open and accessible to the public.

All PROW that are maintainable by the Council receive two surface-cuts to grass and low-lying vegetation per year. This cyclical programme of cutting commences on 1st May and 1st August each year.

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PROW where vegetation overgrowth restricts public access are also subject to a proactive clearance programme. This involves targeting the worst-affected locations for treatment following reactive inspections. This work is undertaken during the winter season to minimise the impact on nesting birds and other wildlife.

Across the County, the nature of PROW varies. There are many kilometres of rural Footpaths and Bridleways which are typically unsurfaced and where implementing strict and consistent maintenance criteria is not possible. There are also a number of more 'urbanised' PROW with tarmac or sealed surfaces.

The approach we take to maintaining PROW depends on the circumstances of each individual route is outlined in the below table.

| Type of Maintenance | All PROW | Urban and bound PROW | Rural and unbound PROW |
|---|---|---|---|
| **Safety Inspections** | No programmed inspections: defects inspected reactively. | | |
| **Reactive Maintenance** | | Managed by Highway Officers in accordance with intervention requirements for Footway & Cycleways | Defects are investigated and managed as appropriate by Rights of Way Officers |
| **Programmed work** | Determined according to Capital Maintenance Programme prioritisation criteria | | |
| **Surface vegetation cut** | | No cut required | Grass sections are cut twice annually. Additional vegetation cuts will be organised where appropriate |

## The PROW Hierarchy

A PROW Hierarchy has been developed as part of the Council's ambition to enhance access to the countryside and to promote sustainable travel and healthier lives.

The Hierarchy ranks PROW according to their importance to our communities. The highest priority routes identified in the PROW Hierarchy will be inspected annually in order to support a more proactive approach towards maintenance interventions to reflect their importance to our communities. The hierarchy will also be used to help prioritise how investment in our PROW is allocated in our Capital Maintenance programme.

## The ROW Improvement Plan

The Rights of Way Improvement Plan (ROWIP) is a document that the Council is legally required to produce by the Countryside and Rights of Way Act 2000.

A ROWIP should set out the local highway authority's approach to managing its PROW and securing improvements to the network, as well as an assessment of how the PROW network meets present and future needs, the opportunities it provides for outdoor recreation, and improving the network's accessibility.

The ROWIP is required to be reviewed and, if necessary, re-published every 10 years. Cambridgeshire's current ROWIP was published in 2016 and is available here.

## PROW Change of Surface Authorisation process

PROW may be the subject of development. Examples include where sealed surfaces are provided for wheeled users or to improve year-round accessibility, or where a route is developed for land management purposes.

All changes to the surface of a PROW must be reviewed and authorised by the County Council. Any decision regarding the resurfacing of a PROW will take into account the maintenance requirements that the new surface introduces.

Details of the PROW Change of Surface Authorisation process can be found here: Rights of way | Cambridgeshire County Council under change of surface section.

## PROW – Use of Road Planings

The authority reuses road planings won from carriageway maintenance projects on its PROW network reducing costs and recycle material wherever possible. This approach has both sustainability and budgetary benefits.

Where the authority is undertaking maintenance work on its PROW network and using road planings these will always be laid by an appointed contractor and will never be provided to third parties, such as local landowners, to do on our behalf.

## Diverting PROW

The County Council has the power to divert PROW where it is considered appropriate. This may be to facilitate development, to allow better land management, or to provide improved access for the public.

Any decision to divert a PROW will take into account the maintenance requirements that the diverted route introduces and the viability to the Council of managing those new requirements.

Details on applying to divert a PROW can be found in the Highways Act 1980 and Town and Country Planning Act 1990, or on the Council's 'Definitive Map' pages, here: Definitive Map and Statement | Cambridgeshire County Council

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## Green Infrastructure

| | |
|---|---|
| **Description** | This includes all highway grass verges in both rural and urban areas, some of which have protected status and the countywide weed treatment programme. |
| **Gross replacement cost** | Included in our 'carriageway asset' valuation. |
| **Quantity of asset** | 4,400km of grass verges<br>2603km (kerbed) & 103km (non-kerbed) of asset weed treated |
| **Condition measure** | Not currently measured. |
| **Asset Management Strategy** | Visibility splays – cut four times a year.<br>Rural road verge network – cut twice a year.<br>Urban road verge network – cut three times a year.<br>Protected road verge network – cut twice a year.<br>Weed treatment – twice a year within built up 40mph limits and below. |
| **Asset Investment Strategy** | This work is funded through revenue budgets. |

### Weed treatment.

Within built up village and town areas within 40mph limits or below, we will carry out planned chemical weed control against kerbs and at the rear of the footway with a minimum of two treatments per year.

Where communities prefer that weeds are not treated with chemical control, the Council will engage with communities and agree a local standard.

### Vegetation management

Where possible the authority will take a proactive approach to managing vegetation growth along the highway as we recognise its impact on the positive use of our active travel routes.

Often overgrown vegetation requires liaison with third parties who own the land on which the vegetation is located. Where this is the case, we will follow a statutory process to ensure this is cutback to the edge of the highway. Where vegetation overgrowth presents an unacceptable level of risk to highway users we will treat this by exception and cut it back as soon as possible.

We will address resident reports regarding vegetation overgrowth promptly whilst noting there are sometimes limitations on when we can work due to factors outside of our control such as bird nesting season which runs from March to September each year.

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Alongside roads and on priority active travel routes the specification we will follow on a reactive basis is:

| Location | Vertical height clearance | Width restriction | Response Time |
|---|---|---|---|
| Footways/footpaths, urban rights of way, and cycle paths | 2.5m | Encroaches within the width of the facility and reduces available width to less than 0.9m. | Emergency – 2 hours<br>Cat 1b – 21 days |
| Carriageway | 5.2m | Encroaches within 450mm of the edge of the carriageway. | Emergency – 2 hours<br>Cat 1b – 21 days |

For all other locations, vegetation cut back to the specification above would be risk assessed and prioritised subject to available maintenance budgets.

## Visibility splays

The County Council places a very high importance on road safety and any changes to the verge management regime should not compromise safety.

Therefore, all vision splays, bends and junctions have been identified, and a specification for the cut at these locations has been designed. The higher the speed limit of the road the greater the length of the vision splay required.

These are cut four times a year throughout the season, with two being carried out as part of the full rural road verge network cut, with an option for additional visits at any locations following identification from either routine highway inspections or correspondence from local members and/or the public that there is a further requirement to cut the vision splay, bend or junction.

During heavy growing seasons extra cuts are carried out as required.

## Rural Road Verge network

The rural road network of verges is cut twice a year, and both of the cuts are the full width of the available verge, thus reducing the build-up of scrub at the back of the verges.

The timing of these cuts are:

- 1st Cut – March/April
- 2nd Cut – September/October

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## Urban Road Verge (URV) network

The URV are those urban roads with speed limits of 40mph and under.

Currently there are a number of different organisations that cut the verges in Cambridgeshire's urban areas on the County Council's behalf as follows:

- Cambridge City Council
- Huntingdonshire District Council
- Huntingdon Town Council
- St Neots Town Council
- Parishes.

They are paid what it would cost the County Council to cut the grass based on a square metre area for three cuts per year. This approach will be reviewed shortly.

The County Council's Highway Services partner cuts the remaining urban areas.

## Protected Road Verges (PRV) network

The best examples of verge grassland are managed by the County Council through the PRV scheme, which covers approximately 80km of verge across 67 locations. For example, the species-rich grassland at Stocking Lane PRV supports Crested Cow-wheat, an important plant restricted to verges of Cambridgeshire, Suffolk and Essex.

Priority must be given to managing the most biodiversity rich verges for their wildlife interest. The wildflowers of the majority of PRVs should recover if appropriate management is implemented.

Currently, the PRVs receive two cuts per year, but grass cuttings are not removed, causing enrichment of the soils and wildflowers become smothered by rough grasses. It is essential that grass cuttings are removed to reduce soil fertility, so that wildflowers can thrive. In addition, some PRVs are becoming dominated by scrub, which will require more invasive management (e.g. scrub removal and soil stripping).

Maintenance regimes for PRVs are developed in collaboration with our natural environment team who will identify exactly how and when these routes should be maintained.

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## Trees

| | |
|---|---|
| **Description** | This relates to highway trees only which are within the highway or within falling distance of the highway.<br>The Council is responsible for all trees on the adopted highway.<br>It is considered that there are over 87,000 trees around the county that are located on or within falling distance of the public highway. |
| **Gross replacement Cost** | £1,155,100 *(Source: A Canopy Assessment of Cambridgeshire County Council land holdings, June 2024. This doesn't include trees on the PROW network).* |
| **Quantity of asset** | 87,000 highway trees (excluding PROW network trees). |
| **Condition measure** | Not currently measured. |
| **Asset Management Strategy** | We take a reactive approach to managing highway trees.<br>Highways trees will all be risk assessed and then routinely inspected based on what category and zone they fall into.<br>Development of a tree maintenance programme is underway.<br>We have identified where all our trees are and we have started to address issues on a worst first basis.<br>To complete this we need to complete a full asset inventory of all our highway trees and risk assess them to implement a routine inspection regime. |
| **Asset Investment Strategy** | Capital Investment figure – Included in Asset Surveys & Investigations budget. This will enable us to complete a full tree inventory.<br>Maintenance work is funded through available revenue budgets. |

**Tree Risk Management.**

The Council will carry out regular inspections of highway trees to ensure safety both for users of the highway and adjacent properties.

We will categorise trees using a 'zones' methodology as identified in the table below, which will define inspection frequency. All highway trees, (excluding rural public rights of way), within distance of our road network will be inspected informally by a Highway Maintenance Officer, (HMO) at least annually as part of driven or walked network hierarchy inspections.

All highway trees will receive an initial formal inspection from the ground where they will be risk assessed and assigned a risk category. This will be carried out using the VALID Tree Risk system (Visual Assessment of Life, Injury, and Damage). This risk category and which zone they are in will then determine how regularly they are inspected.

Regular formal walked inspections of highway trees will place a maximum of either every three years or every five years dependent on what Zone they fall. This duration may be reduced depending on the level of risk that tree presents following completion of a detailed risk assessment.

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We will routinely inspect rural and urban highway trees countywide at the following maximum intervals:

| Zones | Network Hierarchy | Usage Criteria | Inspection Frequency |
|---|---|---|---|
| Zone 1 (High Use) | Strategic Routes/ Main Distributors, Active Travel Hierarchy Cat 1 and 2 routes and urban rights of way. | High volumes of traffic and public access/ occupancy* | Maximum every three years<br>*Following completion of a detailed risk assessment of individual tree and condition/ location dependent.* |
| Zone 2 (Low Use) | Secondary Distributors/ Link Roads/ Estate Roads, all other Active Travel Hierarchy routes and rural rights of way. | Moderate to low volumes of traffic and public access** | Maximum every five years<br>*Following completion of a detailed risk assessment of individual tree and condition/ location dependent.* |
| Zones 1 & 2 | All | Reports of damage following Amber category or higher severe weather events | All Priority 1 categorised trees as soon as practicably possible following the amber event |
| N/A | All | Reports of tree damage (non-emergency report). | Within 10 working days |

** High use public access/occupancy areas are defined as areas with high pedestrian/cycle movements in cities & town centres.*

*** Low use public access/occupancy areas are defined as areas with moderate to low use pedestrian/cycle movements in villages & rural areas.*

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For trees which fall outside of the standard three or five year inspection period detailed above due to issues identified during the risk assessment process, the inspection period shall be as follows:

| VALID Risk Band | Annual Risk of Harm | Inspection Interval | Action Required |
|---|---|---|---|
| Acceptable | < 1 in 1,000,000 | 3–5 years (zone dependent) | No action needed |
| Tolerable - Low | 1 in 1,000,000 to 1 in 100,000 | 2–3 years* | Monitor; routine inspections |
| Tolerable - Medium | 1 in 100,000 to 1 in 10,000 | 6 months to 2 years* | Reinspect or carry out programmed work |
| Unacceptable | > 1 in 10,000 | Immediate/within 6 months* | Immediate mitigation required. |

**The exact timeframe will vary depending on species of tree, location age and risk score and will be driven by the risk assessment completed specific to each tree.*

## Response times

The following details the response times we will follow when undertaking work involving highway trees:

- If an emergency response is required to an incident, the Council will take all necessary actions to make the highway safe by removing the hazard or obstruction as soon as possible.
- On all other occasions the timescale of the response will be dependent on the level of risk posed to highway users by the identified defect.

The following table summarises our response times relative to the identified defect:

| Level of Defect | Targeted response time |
|---|---|
| Emergency - Unstable tree causing danger of collapse onto highway. | 2 hours |
| Category 1b - Overhanging tree leading to loss of height clearance over carriageway, footway, or cycleway. * / ** | 21 days |

** A tree is classed as obstructive on footways / footpaths, urban rights of way, and cycle paths when it encroaches within 2.5m vertically and within the width of the facility.*

*** A tree is classed as obstructive on carriageways when it encroaches 5.2m vertically and 450mm from the horizontal edge of the carriageway.*

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## Third Party Trees.

The following identifies the process for managing third party trees adjacent to, or within falling distance of the public highway:

- The Highway Authority may use powers under Section 154 of the Highways Act (1980) at its discretion to serve notice upon the owner of the relevant land to undertake works to a tree that poses a hazard or causes an obstruction.
- Where the condition of a tree on third party land that is adjacent to and within falling distance of the highway is considered to present a hazard, this will be recorded, and contact made with the landowner within ten working days via letter.
- The landowner will be informed of the location of the tree and details of the assessed hazard.
- If the work required is not completed within the timescale stated, formal enforcement action will be taken using powers provided under Section 154 of the Highways Act 1980, including the recovery of any costs incurred in making the tree safe.
- Where a tree on third party land presents an immediate risk to highway users the authority reserves the right, without prejudice or assumption of liability, to take emergency action as soon as it sees fit to make safe.
- Where a third party owned tree falls across the highway, the Council will seek to recover all costs from the owner of the tree incurred in carrying out the work inclusive of traffic management and staff costs.

## Replacement of existing trees and planting new trees.

The following identifies the process for replacing existing highway trees and planting new trees within the highway boundary:

- We will provide two replacement trees for every single tree removed from the highway, where budget is available.
- Where no budget is available the council will contact the local parish, city, or district council to see if they or residents will pay for the planting of replacement trees.
- The local council member will also be engaged on the proposed tree removal and opportunity for replacement.
- Members of the public will be consulted on the proposed felling/removal of street trees on the public highway, except those removed in an emergency.
- There may be occasions when replacement trees need to be planted in separate locations to those that have been removed, for such reasons as safety risk, impact upon other highway infrastructure, or ongoing maintenance considerations.
- Wherever possible, replacement trees will be planted in the same location as the trees that have been felled. If that is not possible, the new trees will be planted as close as practicably possible.
- The council will assume maintenance responsibility for any such replacement trees if they are planted on the adopted highway.

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- The council will consider licensing new planting on the public highway where it is considered safe, feasible and appropriate.
- Under Section 96 of the Highways Act, district, town, or parish councils may apply to plant and maintain trees on the highway. The council will need to be satisfied that the trees are suitable, considering safety, location, utility apparatus, water extraction, tree canopy and future maintenance implications.
- For trees planted under Sections 96, responsibility for the maintenance of trees will rest with the relevant local authority.
- Where trees are included within new highway infrastructure offered for adoption by the council, this will typically be subject to the council's development management policies and procedures. Adoption is via Sections 38 or 278 of the Highways Act 1980.
- Any proposed planting locations for on highway trees within three metres of any area of bound highway, either road or footway should be approved in advance by the tree officer.

## Subsidence.

The following identifies the process for how we will manage reports of subsidence allegedly caused by highway trees:

- The council may, on a case-by-case basis, consider removing highway trees where there is evidence, that they are the cause of building subsidence.
- The council will carefully consider any relevant claims for subsidence damage but does not accept as a matter of course that nearby highway trees are likely to cause or contribute to a subsidence problem.
- Subsidence claims related to highway trees are administered by the Councils Insurance Team.
- The claimant must provide substantive evidence to demonstrate that the highway trees have caused the subsidence and where appropriate the council will obtain an independent third-party opinion.

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## Winter Services

| | |
|---|---|
| **Description** | The Winter Service deals with regular, frequent, and reasonably predictable occurrences like low temperatures, ice, and snow, as well as exceptional weather events.<br>Although a specialised area, the Winter Service is a significant aspect of network management both financially and in terms of its importance to road users. It can also have significant environmental effects. |
| **Gross replacement Cost** | Not applicable |
| **Quantity of asset** | P1 network – 2,022km<br>P2 network – 2,037km<br>P3 network – 598km<br>Footways and Cycleway network – 148km |
| **Condition measure** | Percentage of precautionary treatment runs completed within the target period. |
| **Asset Management Strategy** | Through the adoption of the Winter Maintenance Policy and Operational Plan Cambridgeshire County Council can demonstrate that they are meeting their current legal obligations and are doing so in a way which ensures that their resources are being deployed in the most economic, efficient, effective, and environmentally friendly manner. |
| **Asset Investment Strategy** | Winter service is funded through available revenue budgets. |

The Winter Service Policy and Operational Plan is a controlled document and as such is not generally available for public dissemination.

Further information made available to the public is provided on our web pages [Gritting roads, cycleways and paths | Cambridgeshire County Council]

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# Road Safety

The County Council has statutory obligations in relation to road safety and wherever possible a Safe System approach to the management of the highway should be the starting point for any highway interventions.

This approach is embedded in how we manage each of our assets and covered in the relevant sections above.

## Cluster site management

The County Council receives collision data from Cambridgeshire Constabulary monthly. This data is monitored by an automated Road Safety Dashboard which is published on the County Council Website.

Cluster Site analysis is completed annually. A Collision Cluster Site is identified as any junction or 100m stretch where three or more fatal or serious injuries, or six or more injury collisions occur of any severity in a three-year period.

Once a Cluster Site is identified the Road Safety Audit team will complete an audit of the location to identify possible engineering safety measures and once identified will work with the other teams to instigate any changes.

Any maintenance work identified at these locations will be prioritised for delivery.

## Fatal Review Process

In the event of a fatal collision on the highway the authority will inevitably come under a great deal of scrutiny, and it is paramount that detailed inspection records are maintained, and decision logs recorded when carrying out or delaying work.

In the event of a fatal road traffic collision on the county council owned road network officers from the Road Safety Team, Highways Maintenance Team and Cambridgeshire Constabulary attend the location within seven days of the event.

The combined team complete an audit of the location in terms of asset condition, environment, and driver influences. A report is completed and where any remedial works are identified these are identified and actioned immediately.

If the initial police investigation identifies a defect then this will be communicated to the Road Safety Manager for immediate access.

## International Road Assessment Programme (iRAP)

In 2024 the County Council completed an iRAP study of all its A class roads. The output report details the risk rating (stars) for each 100m stretch of road.

iRAP also includes cost benefit analysis enabling the user of the iRAP system to add features to a stretch of road, give a cost estimate of those changes and the anticipated safety gain from doing so.

Reviewing the iRAP report identified that where there is solid white edge of carriageway markings these should be replaced with ‘Raised Rib’ lines as an audible warning in the event of running wide on a road due to lack of concentration or fatigue.

Teams will review the iRAP report when considering any maintenance activity and improvements such as the ‘Raised Rib’ recommendation will be incorporated into the delivery of capitally funded maintenance projects.

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## Vision Zero Partnership

The County Council is a board member of the Vision Zero Partnership. The partnership has ambitious targets to cut road death and serious injury collisions by 50% by 2030.

To achieve that aim the partnership have adopted the 'Safe System Approach' to road safety.

The safe system acknowledges that humans make mistakes, and to mitigate the harm caused by those mistakes engineering can be considered as one option to reduce harm.

This is directly linked to Cluster Site Analysis, iRAP, and Fatal Collision Reviews outlined above.

## High friction surfacing

The use of High Friction Surfacing (HFS) is not permitted on the County Council's Road network, without the prior written authorisation of the Road Safety Engineering team.

Where a high PSV is required, then resurfacing with a high PSV (68psv) surface course should  the default approach.

## Mirrors on the highway

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

- The site in question must have a demonstrable history of injury collisions where poor visibility is a contributory factor.
- The reduced sight line must not be due to an object which can be realistically removed, such as a parked vehicle or overhanging foliage.
- 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 by headlight or sun reflection. The judgements made about the speed and distance of approaching traffic can be distorted when using a mirror. Each application will be considered on its merits.

If a mirror placed on the public highway is considered a hazard or is the subject of a complaint, it will be removed without notice and placed in storage for retrieval by the owner for a two week period before being recycled of disposed of.

## Memorials and Floral Tributes on the highway

It is increasingly common for families and friends to place memorials on the highway in memory of loved ones who have died in road traffic collisions, or other circumstances on the highway.

The Council recognises and respects the wish of bereaved families and friends to mark these deaths in this way but has a legal duty to ensure that highways are safe and to make sure that public open spaces are kept free from debris. There are also planning rules, which would cover the erection of permanent memorials. Although it can sometimes be difficult for grieving friends and family to understand, the Council must balance the wishes of the bereaved with their wider duties on public safety.

The distraction of other road users and the safety of those placing or maintaining memorials are the overriding safety issues in the consideration of roadside memorials.

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Therefore, it is proposed that these are dealt with in a sympathetic, understanding, and sensitive way, with each request considered based on the specific location and circumstances involved.

The placing of floral tributes or memorials will therefore involve liaison between the bereaved family, the Police Family Liaison Officer and the Local Highways Manager or the respective area. All decisions will be based on the principles outlined below.

Any floral tributes left at a site should be allowed to remain for a period of not less than 14 days, but generally not more than 12 weeks.

In cases where floral tributes are felt to have an adverse impact upon safety (for example by obstructing visibility for drivers etc.), the flowers will be removed or re-positioned immediately, and arrangements made for the bereaved to be notified, usually by the Police Family Liaison Officer.

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 placed where they will not create any problem, most situations will have some form of potential hazard.

In circumstances where the bereaved family (or the local community) request a permanent memorial, it may be possible to satisfy such requests by encouraging the provision of benches, trees, artwork, or other suitable items at locations away from the highway, and this should be considered in the first instance. The Council will help facilitate these requests wherever possible.

Even where memorials have been agreed, the Council cannot guarantee that these sites won't be disturbed or require removal in the future. If this is the case, the Council will make every effort to work with the bereaved to ensure this is managed sensitively and provide alternative options, if required.

Any decision to remove a roadside memorial must be communicated to the bereaved in advance, usually through the Police Family Liaison Officer.

Existing roadside memorials, in place prior to the adoption of this policy, will be reviewed on an individual basis with the family concerned, where they can be identified.

## Skid Resistance

The maintenance of adequate levels of skidding resistance on carriageways is one that contributes significantly to network safety. 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 surface passes from being 'safe' to 'dangerous'. Difficult sites are those where the geometry increase the risks of skidding accidents, for example, bends, junctions, steep gradients, pedestrian crossings and traffic signals.

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The parts of the network to which this policy applies are based upon our maintenance hierarchy and incorporates Strategic Routes and Main Distributor Roads. A list of roads that are routinely tested and for which this Skid Resistance Policy is applicable is given in the table below.

| Road Number | From | To | Length (km) | Year |
|---|---|---|---|---|
| **Strategic Roads** | | | | |
| A1101 | Lincolnshire boundary | Norfolk boundary | 12.68 | 2 |
| A1303 | A428 | M11 junction 13 | 2.76 | 2 |
| A605 | Entire length | | 26.71 | 2 |
| A10 | Entire length | | 55.39 | 3 |
| A141 | Entire length | | 55.54 | 3 |
| A142 | Entire length | | 37.72 | 1 |
| A505 | Entire length | | 19.08 | 1 |
| A1198 | A1307 | A428 | 13.15 | 1 |
| ***Total length of Strategic roads*** | | | ***223.03*** | |
| **Main Distributor Roads** | | | | |
| A1101 | Shippea Hill | B1411 | 13.19 | 2 |
| A1303 | M11 junction 13 | A1304 | 20.28 | 2 |
| A15 | Entire length | | 3.16 | 2 |
| A603 | Entire length | | 18.71 | 2 |
| A1096 | Entire length | | 5.57 | 2 |
| A1123 | Entire length | | 39.58 | 2 |
| A1198 | A428 | County boundary | 20.30 | 2 |
| A1301 | Entire length | | 14.88 | 3 |
| A1304 | Entire length | | 10.05 | 3 |
| A1307 | Entire length | | 88.11 | 3 |
| A1421 | Entire length | | 3.75 | 3 |
| A1309 | Entire length | | 6.83 | 2 |
| A1134 | Entire length | | 20.96 | 1 |
| B1040 | A141 | B1095 | 16.92 | 1 |
| B1042 | Entire length | | 6.47 | 1 |
| B1043 | C105 | C339/A14 | 3.95 | 1 |
| B1049 | A14 | A1123 | 15.41 | 1 |
| B1050 | A14 | A1123 | 13.88 | 1 |

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| | | | | |
|---|---|---|---|---|
| B1095 | Entire length | | 6.14 | 1 |
| B1102 | A142 | A14 (omit Isaacson Road, Burwell) | 15.94 | 1 |
| B1381 | Entire length | | 8.11 | 1 |
| Addenbrookes Road A1301/U7046 | Hauxton Road | Dame Mary Archer Way | 2.83 | 1 |
| ***Total length of Main Distributor roads*** | | | ***355.02*** | |
| ***Total length of testing road network*** | | | ***578.05*** | |

Cambridgeshire County Council has set appropriate intervention levels, (IL) for its network, based upon the table below, amended to reflect lower traffic levels. These are reviewed on a three-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 below.

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 Highway Capital Maintenance Programme, 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.

Initial investigatory Level (IL) is based upon various factors including road type, alignment or feature. CS 228 Rev2, Table 4.2 contains nationally defined Investigatory Level (IL) categories, descriptions and values, for trunk roads and motorways. This are applied to the roads within Cambridgeshire.

CS 228 Rev2 Table 4.2 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 | LR | ST | | | | |
| B | Dual carriageway non-event | LR | ST | ST | | | |
| C | Single carriageway non-event | | LR | ST | ST | | |
| Q | Approaches to and across minor and major junctions, approaches to roundabouts | | | | ST | ST | ST |
| K | Approaches to pedestrian crossings and other high risk situations | | | | | ST | ST |
| R | Roundabout | | | | ST | ST | |
| G1 | Gradient 5-10% longer than 50m | | | | ST | ST | |
| G2 | Gradient >10% longer than 50m | | | | LR | ST | ST |
| S1 | Bend radius <500m – dual carriageway | | | | ST | ST | |
| S2 | Bend radius <500m – single carriageway | | | | LR | ST | ST |

- ST in cells within the table above indicates the range of ILs that should generally be used for roads carrying significant levels of traffic
- 'LR' in cells indicates a lower IL that may be appropriate in lower risk situations, such as low traffic levels or where the risks present are mitigated by other means, providing this has been confirmed by the crash history
- Exceptionally, an IL higher or lower than those indicated in the above Table may be assigned if justified by the observed crash record and local risk assessment
- If more than one site category is appropriate, then the site category with the highest recommended IL shall be selected
- If the highest recommended IL for the site categories are the same, then the category highest up the table shall be selected (A being the highest on the table and S2 the lowest)
- ILs for site categories Q and K shall be based on the 50m approach to the feature and, in the case of approach to junctions, through to the extent of the junction
- The approach length may be extended when justified by local site characteristics
- Categories G1 and G2 shall not be applied to uphill gradients on carriageways with one-way traffic
- Category S1 shall be applied to all bends on carriageways with one-way traffic where the radius of curvature is <100m
- Category S2 shall be applied to all bends on carriageways with two-way traffic where the radius of curvature is <100m
- Category S1 shall be applied to bends on carriageways with one-way traffic with a radius of curvature > 100m but <500m where the speed limit is > 50mph
- Category S2 shall be applied to bends on carriageways with two-way traffic with a radius of curvature > 100m but <500m where the speed limit is > 50mph
- The site category and IL applied to a length shall be applied to all lanes of the carriageway that have traffic running in the same direction
- All lanes of the carriageway (with the same direction of traffic) should be included when identifying what site category and IL will be applied. This includes the hard shoulder where hard shoulder running is implemented
- The site category and IL information shall be recorded together with the date of assessment

Cambridgeshire County Council bases its approach to setting ILs to Table 4.2 from CS 228 Rev2. Where the table permits lower values (LR), the Authority will consider adopting these values.

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## Detailed Site Specific Risk Assessments and Site Investigation

When routine SCRIM (Sideways Force Co-efficient Routine Investigation Machine) 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 three calendar years preceding the SCRIM survey are deemed to have a wet skidding injury accident history.

## Method of Prioritisation of Sites

Those sites that have skidding resistance 0.25 or more below IL and also have a wet skidding injury accident history will be prioritised for further site investigation jointly by the Authority's Asset Management and Road Safety Engineering team and propose any remedial action if appropriate.

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 asset management and road safety engineering 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 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 during the three calendar years preceding 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.

Any priority treatments will be identified and fed into the Highway Capital Maintenance Programme.

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.

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Cambridgeshire's Road Safety team will work with colleagues within the Highways Maintenance 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, treatment to improve skid resistance is scheduled to be undertaken. Upon completion of the works, signs will be removed.

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## Highway Enforcement

In the most serious cases the County Council will consider the use of enforcement powers and employs two highway enforcement officers to do this.

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

- Regulators Compliance Code - Regulators' Code The Regulators' Code is a statutory code of practice that sets out how regulators should engage with those they regulate. It aims to promote a risk-based, proportionate, and targeted approach to regulatory activities. The code emphasizes supporting businesses and individuals to comply with regulations and encourages regulators to be transparent, share information, and provide clear guidance.
- Code for Crown Prosecutor - The Code for Crown Prosecutors | The Crown Prosecution Service The Code for Crown Prosecutors is a document that outlines the general principles Crown Prosecutors must follow when making decisions about whether to prosecute a case.
- Enforcement Coordination - Enforcement coordination refers to the collaboration and harmonization of actions taken by different regulatory or law enforcement bodies to ensure consistent and effective application of rules and regulations.
- The Guidance Manual for the Cambridge Parking Scheme – This refers to a set of policies and procedures established by Cambridgeshire County Council for managing parking within Cambridge, particularly within Resident Parking Schemes.
- 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:

- 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

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- Street Traders
- Tables and Chairs
- Vehicular Access
- Vehicles for sale on the highway

## 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 the Travellers Liaison Officer in confirming that the encampment is on highway land and whether any action should be taken to achieve the removal of the encampment off the public highway.

Any decision to instruct the councils legal representatives to serve notice on the travellers and to seek an appropriate court order will be made by the Head of Highways Maintenance and Management, in consultation with the Travellers Liaison Officer in accordance with the County Council'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.

Any action that is taken will have been carefully considered and will be in line with the Council's Enforcement Policies.

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# General

The following section sets out non-asset specific highway policies and standards that apply to the safe and effective operation of the highway network in Cambridgeshire.

This 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
- embrace the Localism agenda
- focus on local priorities

## 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

Cambridge City Council are responsible for the management and enforcement of A-boards with Cambridge City.

## Abandoned vehicles on the highway

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

## Access Protection Markings

Access Protection Markings (APM) 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 available appropriate to the length of marking requested. The property owner is expected to meet the cost of providing and maintaining any requested APM.

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

APM are white 'H' shaped lines painted onto a road and situated in front of accesses to highlight dropped kerbs to other road users. They may be used to highlight any type of access or uncontrolled crossing point 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 of photos, dates, times and if relevant, police incident report numbers.

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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.

## 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.

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

Where applicable, an Equality Impact Assessment may be required to ensure we consider the impacts upon all the identified protected characteristics. If required, an individual site-specific assessment will be carried out to ensure all relevant potential equality implications are addressed.

## Digital advertising screens

Digital advertising screens, hubs, totems, or kiosks shall not be permitted or licenced for use within the highway. Such screens constitute unnecessary street clutter, can be detrimental to inclusive mobility and can represent a safety hazard, either through obstruction or distraction.

Digital display screens may be licenced where they will act as community notice boards as opposed to advertising screens. Such screens will only be licenced where they do not obstruct the highway to an unacceptable level and are located in pedestrianised spaces where they will not serve as a distraction to road users.

## Encroachment and obstruction

Any allegation of an encroachment/obstruction onto/on a highway will be notified to the landowner requesting appropriate action to remove the encroachment. The encroachment will be noted on the Council's highway records and disclosed on any property searches carried out during conveyancing. The Council may take enforcement action, at cost to the relevant landowner, to remove encroachments or obstructions if there is a safety risk or a need to ensure access to the affected area for highway purposes.

| Item | Defect | Investigatory Level | If risk assessed as Cat 1a | If risk assessed as Cat 1b |
|---|---|---|---|---|
| Highway general | Oil/debris/mud/stones/gravel likely to cause a hazard | Present | 2 hours | NA |
| | Illegal signs | Causing a safety hazard | 2 hours | NA |
| | Obstructions in the highway | Causing a safety hazard | 2 hours | NA |
| | Obstructed sight lines | Causing a safety hazard | 2 hours | NA |

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| | | | | |
|---|---|---|---|---|
| Highway general | Unauthorised ramps in carriageway | Causing a safety hazard | 2 hours | NA |
| | Embankment and cuttings apparently unstable | Present | 2 hours | NA |
| Other dangers to the public | Anything else considered dangerous | Present | 2 hours | NA |
| Graffiti Removal from County Council owned assets | Graffiti will be removed from CCC owned assets that is:<br>• offensive, gang related, insulting or against public interest<br>• likely to encourage more graffiti or tagging<br>• inappropriate for the location or out of keeping with the surrounding area<br>• a cause of complaints to the Council<br>• on a listed building or in a conservation area<br>• libellous or potentially libellous intimidating | For offensive graffiti | 5 days | NA |

## 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.

## 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 should be provided at all formal 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.

## 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 or by a suitable maintenance agreement and as such will be considered on a case-by-case basis.

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## 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. Christmas trees are considered a religious symbol.

## Stopping up 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 always be undertaken with the relevant parish council and local County Councillor.

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# Quality Management, Performance Reporting and Efficiency

## Quality and Defect Inspections

Our officers are responsible for ensuring that the work which is delivered on our network is of a sufficient quality and meets agreed specifications and standards.

There is a structured process where our Term Services Contractor evaluates their own quality assurance practices and processes to identify areas for improvement and ensure compliance.

In addition to this we will inspect a randomly generated sample of 5% of orders completed each month for all reactive repairs undertaken. For all non-reactive repairs this sample will be 100% of works orders raised. This will be recorded in our Highway Asset Management System and reported annually as a service standard.

If any areas are showing non-compliance we will proactively identify how we can remedy this with our contractor to ensure the standard of work delivered on the network meets our requirements.

We will also undertake inspections whilst our contractors are on site to ensure that they are delivering the work in accordance with agreed standards and regulations including adherence to all Health and Safety requirements.

Going forward this approach will be embedded in our service standards.

## Key Performance Indicators

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

The Service Standards:

- Are closely linked with asset condition, (both existing and desired), and aspirations from both the Council and Customer (what it is expected to deliver now and throughout its lifecycle)
- Relate to such factors as: compliance with statutory requirements, quality, quantity, reliability, responsiveness, environmental effect, cost, and performance.
- These figures will be reported annually to the relevant committee.

Our 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 Highways Asset Management Strategy.
- 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.

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The prescribed Service Standards are shown in the tables below.

| Service | Measured by | Target Standard |
|---|---|---|
| **Highway Safety** | | |
| **We will inspect carriageways, footways & cycleways for defects with the busiest routes inspected most frequently** | Percentage of Safety inspections completed on time within stated tolerance | **100%** |
| **We will respond to make safe emergency incidents** | Percentage of emergency incidents attended within response times* | **90%** |
| **Carriageway defects** | % of high priority (Cat 1 (1a and 1b) defects repaired within response times* | **90%** |
| **Footway/ Cycleway defects** | % of high priority (Cat 1 (1a and 1b) defects repaired within response times* | **90%** |
| **Carriageways & Footways** | | |
| **We will improve the overall condition of our *tbc* carriageway routes.** | Asset condition data | **Score to be reported and tracked annually.** |
| **We will improve the overall condition of our footway network.** | Asset condition data | **Score to be reported and tracked annually. Should exceed base amount.** |
| **Winter Maintenance** | | |
| **We will ensure that the identified gritting routes are treated during periods of snow and ice** | Percentage of precautionary road salting completed on time within identified season* | **100%** |
| **Drainage** | | |
| **We will empty roadside gullies and cut grips in highway verges** | Delivery of grip cutting programme and cleansing of 50% of known gully network countywide per year | **100%** |

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|---|---|---|
| **Customer Service** | | |
| **We will put our customers at the heart of everything we do – Customer Satisfaction** | Year on Year improvements in the National Highways and Transport headline Highway Maintenance scoring metric | **N/A – Score to be reported and tracked yearly. Should be increasing year on year.** |
| **We will put our customers at the heart of everything we do – Customer Response Times** | Our Asset Management System will track how quickly we respond to our customers when the report a defect or raise a query against our Service Level Agreement which states a response should be provided within 10 working days. | **90% or higher within 10 working days** |
| **Green Infrastructure** | | |
| **We will apply weed killer to highway areas** | Within built up village and town areas within<br>40mph limits or below, carry out planned chemical weed control with a minimum of two treatments in each year. | **100%** |
| **We will cut the grass on highway verges to maintain visibility** | Number of routine cuts of grass verges per annum – Rural<br>Number of routine cuts of grass verges per annum – Urban | **2**<br>**3** |
| **Carbon Reduction & Sustainability** | | |
| **We will report how much carbon we expend and what processes we have implemented to reduce this** | C02e expended on highway maintenance projects annually<br>C02e saved over the last financial year, (should be greater than previous year when data is available). | **t C02e**<br>**t C02e** |
| **We will be as sustainable as possible, reducing our reliance on virgin materials** | Amount of material reused and recycled annually, (should be greater than previous year when data is available). | **t** |
| **Asset Management Principles** | | |
| **We will use data to inform our decision making and asset investment strategies** | Percentage of total road network surveyed annually<br>Percentage of total footway & cycleway network surveyed annually | **50%**<br>**25%** |
| **We will undertake lifecycle planning across each asset type where this is applicable** | Annual completion of lifecycle costing to inform asset investment strategies. | **100%** |

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| Quality Management | | |
|---|---|---|
| **We will ensure that those working on our behalf are delivering to the agreed quality standard** | 5% of works orders completed each month are inspected and recorded in our Asset Management System<br>Number of defects recorded following officer inspections. | **90%**<br>**Annual Figure** |

** 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*

## Efficiency

We know it is important to ensure that we deliver an efficient highways service which represents best value and delivers work to the agreed standards. The approaches we take are targeted to ensure this happens, these are identified as follows:

- A range of procurement options available to deliver best value and draw on a varied supply chain enabling us to ensure programme resilience and competitive pricing.
- Our capital maintenance forward programme is planned and co-ordinated both internally with other maintenance activities, but also with the significant amount of new infrastructure that is being delivered in Cambridgeshire, through organisations such as the Cambridgeshire and Peterborough Combined Authority, The Greater Cambridge Partnership, and by taking opportunities to work with partner organisations such as National Highways.
- We will package work up wherever possible into programme to ensure economies of scale are possible.
- We have a suite of maintenance options that are considered for the rehabilitation of our road network, from preventative surface treatment options, through to resurfacing and reconstruction.
- We are a member of the National Highways and Transport Network, which both benchmarks against peer authorities and measures our efficiency. This is used to highlight the level of efficiency / overall value for money of the Council's Highway maintenance service and identify / target key improvement areas.
- Where we have major work planned, we will identify all work which can be delivered under the traffic management that will be in place for the duration of that project. For example, if we have a resurfacing project we will also look at damaged signs, blocked gullies and any damaged sections of path which can be repaired at the same time.

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# Environment, Sustainability and Innovation

## Sustainability & Innovation

For several years, we have been leading the way in sustainable construction practises when rebuilding Cambridgeshire's roads. The process we use involves recycling existing material into the lower layers of the new road. Doing this has significant cost and carbon savings. We use performance-enhancing grids when doing this to further extend the life of the road and address issues caused by soils underneath the road moving. Last year we recycled 41,000 tonnes of material, saving 305 tonnes carbon dioxide equivalent.

We have also been using materials supplied at a lower temperature than conventional materials and with an increased percentage of recycled aggregate included. This is known as a warm mix product. Using warm mix product across our road resurfacing programmes has both quality and carbon reduction advantages. From a quality point of view, heating the material to a lower temperature means the road is not as brittle. From a carbon saving perspective, we have saved 340 tonnes carbon dioxide equivalent.

We have trialled the use of low carbon cements within our road reconstruction projects. This is a process whereby the existing road is broken down, degraded, and mixed with cement to provide the new road material. Traditionally, conventional cement has been used when following this process, but this comes at a high carbon cost. We switched to low carbon cement across several of our sites in 2024/25 and this enabled us to save 320 tonnes carbon dioxide equivalent.

Building on the successes above, we have recently secured £1.5m from the Cambridgeshire and Peterborough Combined Authority (CPCA) to design and deliver a series of soil affected road repair trials. This gives us the opportunity to find potential solutions and build a case for further investment from central government that is data led.

Lastly, we make use of advanced binders in the bitumen we use for our surfacing materials to ensure that our roads are more resistant to higher temperatures.

Highways is a carbon intensive area of the authority with a historic reliance on use of virgin materials and fossil fuels. A process has been completed to baseline some highway maintenance activities, and this has identified key carbon reduction areas.

Highways report how much carbon has been expended over the course of each budget year, as well as any measures which have been implemented to reduce the amount of carbon expended.

There is a target to improve on the amount of carbon saved year on year although doing this can be impacted by the amount of investment in highways assets. Higher levels of investment equate to more work which results in larger amount of carbon expended. To date the following areas have been identified.

- Reusing & recycling aggregates in road reconstruction projects.
- A default to 'warm' mix instead of conventional temperature aggregates.
- Carbon accounting on named projects within the Capital Maintenance Programme.
- Low carbon instead of conventional cements.

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- Using Hydrogenated Vegetable Oils to power plant and equipment instead of conventional fuels.
- The use of cold recycled products instead of conventional in path and road binder course layers.

It is expected that a switch to a more preventative approach will have a positive impact on carbon reduction as the treatments utilised are less carbon intensive to manufacture and deliver.

Unless identified by exception and subject to separately ring-fenced funding the innovations referenced above will be funded from within the existing budget envelope allocated to each asset.

## Resilience

As well as the resilient road network referenced above in the carriageways section, we have unique challenges across the county which need to be managed carefully when designing, building, and maintaining road infrastructure to withstand and recover from extreme weather events and other disruptive factors exacerbated by climate change.

This involves proactive measures like strengthening existing infrastructure, improving drainage, and using more resilient materials, as well as incorporating adaptive strategies for future planning and investment.

The benefits of a resilient highway network include:

- Reduced disruption to travel and commerce by minimising the impact of extreme weather events, resilience highways help keep roads open and traffic flowing, reducing economic losses and inconvenience for communities.
- Lower long-term maintenance costs by investing in more preventative measures which can reduce the need for costly repairs and rebuilding, saving money in the long run.
- Increased safety through intelligent road design which can improve safety by reducing the risk of accidents caused by flooding, or other weather-related hazards.

The areas we will consider where appropriate and feasible within allocated budgets to ensure our network is resilient are:

- Improved drainage by improving drainage systems and implementing green infrastructure solutions to manage stormwater runoff.
- Strengthening pavement and structures by using more durable materials, designing for temperature variations, and reinforcing roadbeds to withstand heavy rainfall and flooding.
- Raising road elevations in known flooding areas, raising road elevations can help mitigate the impact of storm surges.
- Advanced materials, we are utilising materials that are more resistant to extreme temperatures, erosion, and other environmental factors.

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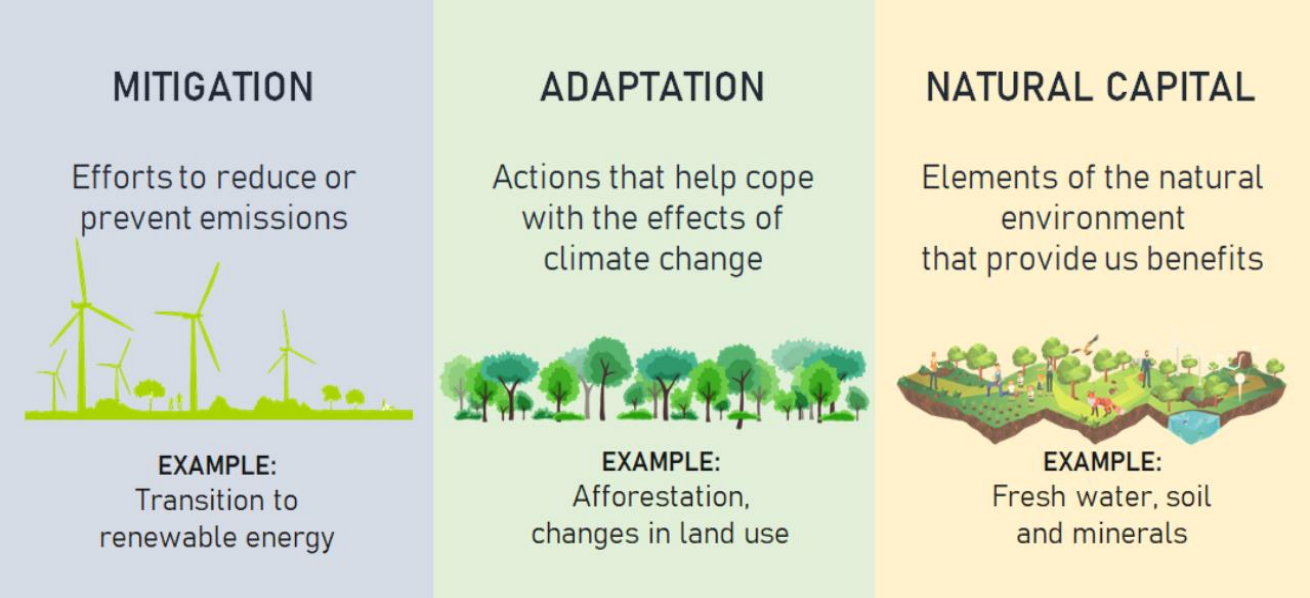
## Environment

Our Corporate Climate Change & Environment Strategy was approved at a meeting of Full Council in February 2022. It sets out how we will work internally, with partners, and with our communities to deliver net zero carbon emissions for Cambridgeshire by 2045.

Also, how we will support communities and our natural environment to adapt and thrive as the climate changes. This is one of our key priorities in the Council's Strategic Framework that we are all working to deliver.

Our Strategy covers these three key areas:




To deliver these, corporately the authority is aiming to:

By 2030

- reduce emissions from our buildings and fleet transport to net zero (scopes 1&2)
- reduce our value chain emissions (all scope 3) by 50.4% (excludes land use and agriculture)
- bring our important biodiversity sites into positive conservation management status

By 2040

- Increase tree and woodland cover on the County Council's estate to 13% and increase hedgerow extent by 5% by 2040, compared to the baseline

By 2045

- Our buildings and infrastructure to be resilient to climate change impacts by 2045
- Cambridgeshire carbon emissions will be Net-Zero by 2045

## Severe weather events

Severe weather events will cause increased damage to the highway network. Amber or higher weather events have become more prevalent in recent years.

Thie impact of these 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 Strategy would need to be reviewed should such an event occur, this would be treated financially by exception.

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.

The occurrence of an Amber or higher severe weather event would trigger additional reactive inspections, as soon after the event as practicably possible, for those assets which have been risk assessed and meet this requirement.

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# Stakeholder Engagement

We understand that the work we deliver on the public highway can be disruptive and whilst it is imperative that work is delivered safely and within budget, we also have a responsibility to our communities and the travelling public to keep them informed. The following details how we will do this across our varied workstreams.

## Customer Focus

Prior to any of our work commencing on site we will inform everyone who may be impacted by our project a minimum number of days in advance dependent on the type of work being delivered.

Wherever possible for planned work we will aim to provide everyone with fifteen working days' notice, and make sure we use different methods of communication to reach as many people as possible.

This will include:

- advanced warning signs,
- letter drops/leaflets
- virtual briefings/parish meeting briefings
- onsite notices,
- press releases/adverts
- social media posts
- email updates/mailing lists
- dedicated pages on our website

We will engage with people at the right time, in the right way. We will make use of our own website to provide scheme specific updates and ensure our communications reach as many people as possible.

We will ensure we are inclusive, accessible and engage professionally and openly to get our projects right first time, taking on board other people's views and opinions and incorporating these into our schemes wherever possible.

It is important that officers working for the council are customer facing and understand that they are working on behalf of our residents. Part of an officer's role is to respond to correspondence in a timely, comprehensive, and professional manner.

We understand that providing timely responses to queries and complaints, especially from elected members, is crucial for local authorities for the following reasons:

- Building trust and transparent communication we understand that timely replies to correspondence are a cornerstone of effective governance. They foster trust and transparency between local authorities and the constituents they serve. When the public, businesses, and other stakeholders receive prompt responses, it reinforces their confidence in the authority's commitment to addressing their needs and concerns.

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- Improving public satisfaction is significantly influenced by the responsiveness of local authorities. Quick and efficient handling of correspondence demonstrates an initiative-taking approach, leading to higher levels of public contentment and support. This, in turn, can result in greater community engagement and a more harmonious relationship between officers and the public who feel heard.
- Efficient problem resolution is essential for the swift closing out of issues. Delays in correspondence can exacerbate problems, leading to increased frustration and potential escalation. By addressing matters promptly we can mitigate risks and resolve conflicts efficiently and more amicably.
- Legal and regulatory compliance is important as we are bound by legal and regulatory frameworks that dictate specific periods for responding to correspondence. Adhering to these deadlines is not only a matter of legal obligation but also of upholding the principles of good governance. Failure to comply can result in legal repercussions and damage to the authority's reputation. We follow the organisations customer service charter which can be found here Customer Service Charter and Standards | Cambridgeshire County Council.
- As a result, all correspondence is logged and tracked to ensure it is responded to within 10 working days.

When delivering work, we have developed a sliding scale for the minimum level of engagement that you should expect from us prior to work commencing. This is detailed in the following table.

| Type of work | Advanced Warning signs | Letter Drop / Leaflets | Website | Further enhanced comms |
|---|---|---|---|---|
| **Emergency** | Where possible and depending on the nature of the emergency retrospective letters or communication may go to communities. The priority however will be attending to make safe as soon as possible. | | | |
| **CAT 1a** Reactive works<br>5-day response time | Yes – if on a traffic sensitive route and in advance of work starting on site. | Where possible and considering the specifics of the work. | **Not applicable due to type of work being delivered.** | |
| **CAT 1b** Reactive works<br>21-day response time | Yes – if on a traffic sensitive route or work is being delivered under a road closure and a minimum of 10 working days in advance of work starting on site. | Yes – if on a traffic sensitive route or work is being delivered under a road closure. | | |

| | | | | |
|---|---|---|---|---|
| **CAT 2** Reactive works<br>13-week response time | Yes - A minimum of 10 working days in advance of work starting on site. | Yes - A minimum of 10 working days in advance of work starting on site if working in an urban area under positive traffic management or a road closure. | **Not applicable due to type of work being delivered.** | |
| **Capital maintenance projects**<br>Annual work programmes | Yes - A minimum of 15 working days in advance of work starting on site. | Yes – A leaflet should be sent to all in the vicinity at least two months in advance of work starting on site.<br>A letter should be sent a minimum of 10 working days in advance of work starting on site. | Yes – these works will appear on our website, and both our leaflets and letters will direct readers to where they can find this. | This will be scheme dependent. |

## Complaints procedure

The organisations complaints procedure can be found here Feedback policy for compliments, complaints and suggestions | Cambridgeshire County Council.

Complaints have two stages, and it is crucial that the level of information and the response itself has been reviewed by a senior manager in the team before being shared with the Head of Service to then review and issue the response.

The lifecycle of a complaint is as follows:

- Stage 1: Head of Service responsible officer
- Stage 2: Service Director responsible officer

## Street Works & Collaboration with others

We are committed to minimising the disruption caused by street works on our network and work hard to ensure they are planned effectively and collaboratively.

Cambridgeshire County Council operates a well-established Permit Scheme that meets the requirements of the Traffic Management Act 2004 and the Traffic Management Permit Scheme (England) Regulations 2007. The scheme ensures all works promoters are treated equally, with robust compliance monitoring in place to reduce disruption, improve journey times, and maintain network availability.

Regular coordination meetings, forward-planning reviews, and enhanced scrutiny of permit applications help reduce short-notice works and improve planning discipline. We recently invested in additional capacity to strengthen collaboration between internal capital maintenance schemes and other work on the network.

The Council uses Street Manager to manage all permits, and Causeway one.network is our public-facing digital platform to publish live and planned works information. It is embedded in our coordination and decision-making processes and supports our duty of transparency, helping residents and stakeholders access up-to-date, reliable information.

The Street Works and Permitting team maintains active dialogue with all works promoters, including utilities and internal project leads. This includes early engagement, programme reviews, and direct feedback on permit quality to support continual improvement and reduce conflicts on the network.

The Council manages urgent and statutory safety works, such as those initiated under emergency utility requirements, through structured processes that require justification and supporting evidence. Disruption is minimised as far as reasonably practicable, and prioritisation is applied according to a clear hierarchy:

1. Critical safety/emergency works
2. Statutory obligations
3. Planned and non-urgent activities

The Council is actively developing a proposal to introduce a Lane Rental Scheme in Cambridgeshire. This would support targeted disruption reduction by incentivising faster, better-managed works on high-impact parts of the network.

The Council's approach is evidence-led, with data used to inform decisions and monitor performance. A focus on clear public communication, consistent standards, and service improvement ensures that Cambridgeshire remains aligned with DfT priorities while supporting local growth and maintaining public confidence in the road network.

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