

Member Induction: Highways

Head of Essex Highways Commissioning – Peter Massie
Head of Maintenance & Operations – David Forkin
Head of Strategy, Governance & Engagement (FHP) - Kim
Gisby

29 June 2026



Agenda

We will cover:

Highways Planning with District partners

Highways Contract – service plans and budgets

Capital works programmes

Network Management

Asset Management

Reactive Maintenance Services

Inspections

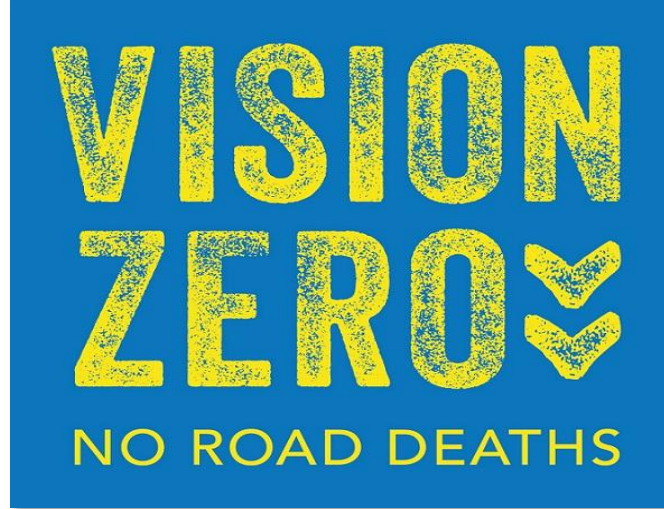
Streetworks

Communications

The Future Highways Programme

Highways service responsibilities

- Maintaining the highway so that it is safe and serviceable
- Managing the network to help keep traffic moving
- Reducing casualties – Safer Essex Roads Partnership



Highways Planning with District Partners



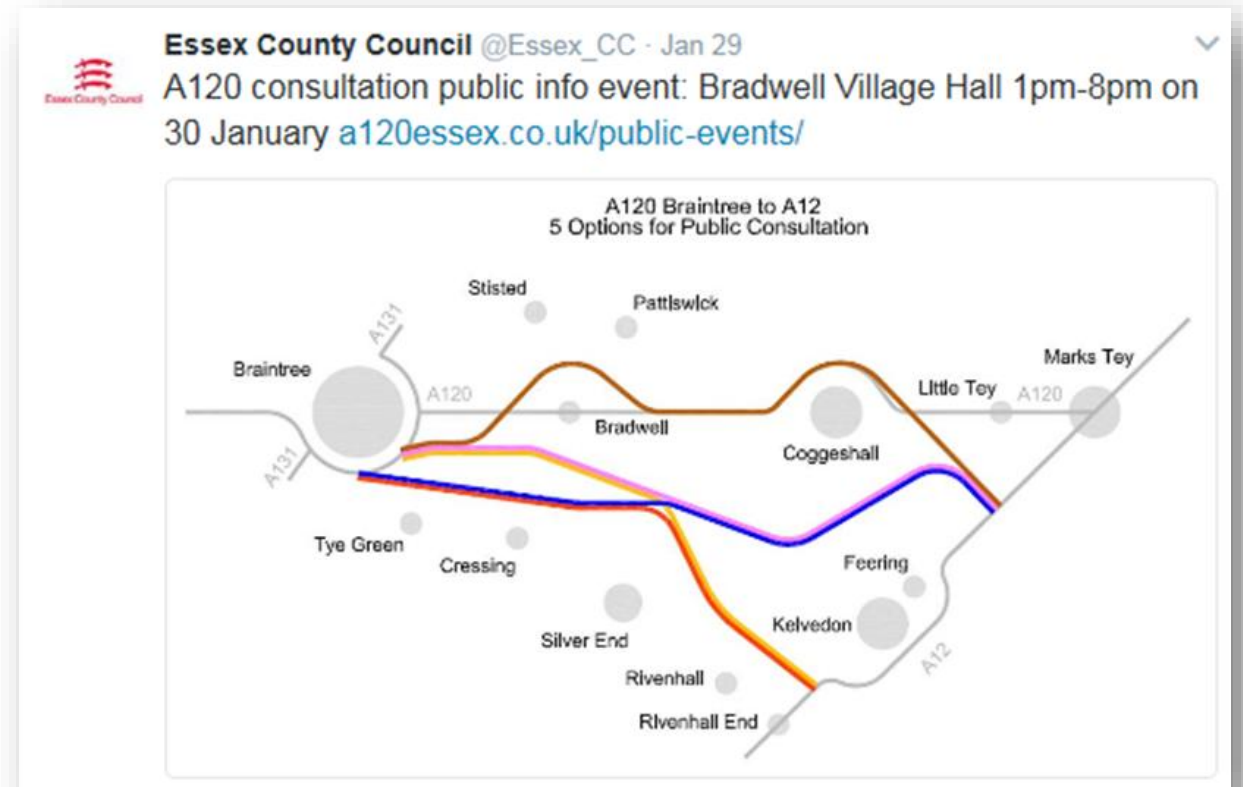
Highways planning

- Our approach to improving the network takes account of the following objectives:
 - Longer-term Essex wide growth plans
 - Local Plan responses – statutory and vital
 - Responding to planning applications
 - Securing the right infrastructure
 - Maintaining a pipeline of projects
 - Promoting sustainable transport



Highways planning and objectives based on:

- Longer-term Essex wide growth plans
- Local Plan Responses – statutory and vital
- Planning Applications
- Securing the right infrastructure
- Pipeline of projects
- Promoting sustainable transport
- Managing the assets we have, including future maintenance costs



Highways Contract



About Essex Highways

- Essex Highways is a strategic partnership, created in 2012 by ECC and Ringway Jacobs, to manage and deliver local highway services from what was once 10 separate highway contracts.
- The Essex Highways partnership delivers an integrated service supported by direct-resource and over 100 supply chain partners, the majority of which are Essex-based.



Contract Summary

- This is a New Engineering Contract 3 (NEC3) characterised by clear and simple terms, collaboration of risk and reward and good relationship management
- This contract is value at approximately £130-150m per year (this varies) and is currently the single largest contract that Essex County Council hold. This contract is treated as a Strategic Partnership.
- Procured via a Competitive Dialogue due to the complexity and scope of requirements. The tender process commenced in July 2010 and the preferred Bidder (Ringway Jacobs) was approved via Cabinet Member Approval in October 2011. Contract commenced 1st April 2012 for an initial period of 10 + 5 years.
- In 2021, a Deed of Variation (DoV) was approved to extend this contract by the max. 5 years, meaning this contract expires on 31st March 2027. Parties are currently working to agree a further DoV which shall vary the contract to extend it by a further 12 months (expiry 31st March 2028).

Partnership with Essex County Council

Essex Highways partnership follows an asset-led 'end-to-end' approach. All elements of delivery are integrated into one delivery model, covering far more than reactive maintenance. We deliver:

- Asset Management and forward programme planning
- Inspections and condition surveys
- Major project management – improvement schemes of key routes, junctions and assets (eg LEDs)
- Capital repair schemes to stretches of carriageways and footways
- Programmed preventative maintenance – gully cleaning; winter and seasonal vegetation; SWAS etc
- Reactive maintenance (prioritised defect repair – potholes; streetlights etc)
- Road safety, through SERP and safety engineering
- Traffic management – regulating the network
- Public Rights of Way - recording, maintenance and accessibility
- Development (Third Party) management – construction standards
- Public communications

Budgets

REVENUE - for maintenance of existing assets. Spend does not increase the value of the asset. Used to make safe while waiting on Capital investment

CAPITAL - (often gained by bidding from Central Government) for longer-term projects and 'new build' or additions/improvements to the asset base that spreads benefits over many years

Annual and Service Plans approach

- Each Essex Highways team sets out the best way to deliver their service within the budget available and in line with ECC policies and strategies
- Jointly agreed between ECC and Ringway Jacobs
- ECC place formal task orders to commit the work
- Essex Highways manage and deliver the work
- Jointly monitor performance



Performance Schedule

48 Key
Performance
Indicators

11 Management
Indicators

Performance Management Framework

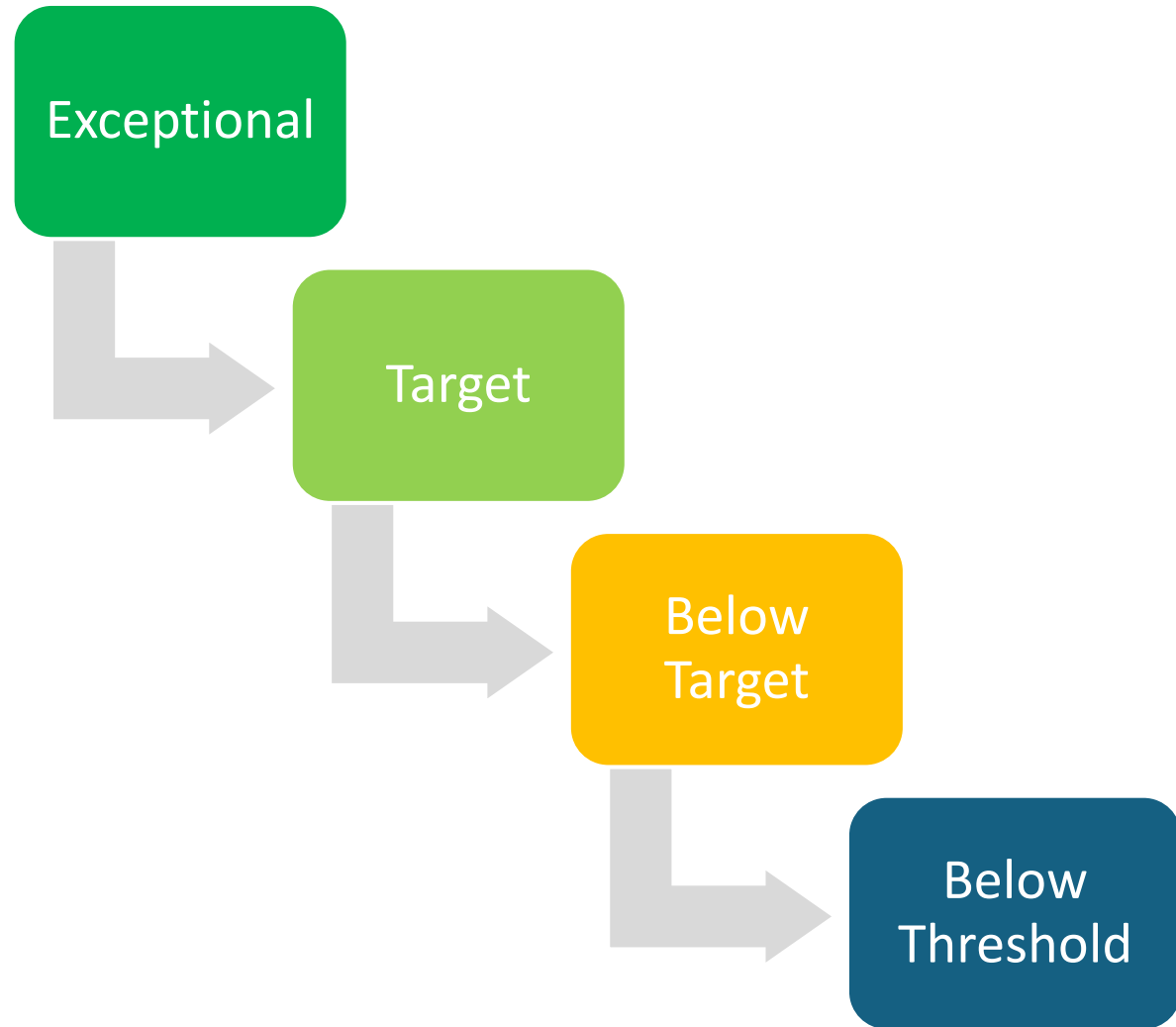
Performance
Management
Meetings

Contract
Review
Meetings

Risk
Reduction
Meetings

Performance
Improvement
Plans

Performance Schedule



- Performance Measures are categorised into:
 - **Key Performance Indicators:** Profit-related measures which could result in profit deductions to Ringway Jacobs at Year End if the targets are not achieved.
 - **Management Indicators:** Performance measures not linked to profit. These measures are embedded to provide a record of performance and delivery in priority areas, as well as to drive continuous improvement.
- KPI targets are reviewed annually to ensure that they remain fit for purpose and continue to provide best performance output for the Authority.

Key Performance Measures

KPIs cover the contract for delivery of works and services

Examples:

Numbers of gullies cleansed per annum	164610
Percentage of street-lights that are 'in-light'	97%
S1 defects attended within 2 hours	98%
% Condition of PR1 routes (mostly A Roads) needing repair	5%
Timely completion of Gritting Routes	98%

Performance is jointly monitored monthly (annually where annual measures)

Capital Works Programmes



Capital works programmes

We have works capital maintenance programmes identified for the following:

- Carriageways
- Footways
- Street lighting
- Structures
- ITS
- Drainage
- Public Rights of Way

These programmes are re-prioritised each year to ensure that the latest available data is used.

Capital works programmes

Road resurfacing:

- Surface Dressing
- Machine surfacing (Inlay)
- Micro-surfacing
- Road reconstruction



Structures:

- Bridges
- Culverts
- Subways
- Retaining walls



ITS (Traffic signals) & VRS (vehicle restraint systems):



SWAS (Surface Water Alleviation Schemes)



- We deliver schemes where we have identified particular flooding problems that need resolution through more than simple cleansing or jetting
- These schemes typically need more thorough investigation, planning and more complex/intrusive engineering on the highway or adjacent, perhaps with new drainage pipework
- We often need to collaborate with landowners to deliver this sort of work which can mean schemes take longer to deliver

Design Services



We trial innovations too

- Warm Asphalt – A13, Hadleigh
- Graphene in surfacing
- Electric mini-digger
- 'Recofoam' surfacing material
- Hydrogen fuel cell lighting
- AI Route Reports
- Air pressure 'grip' cutting



Think Safe, Home Safe

- Safety is at the heart of everything we do. We are focused on providing a safe environment for our employees while developing a culture where everyone is accountable for working safely, ultimately managing and controlling risks.
- ‘Think Safe, Home Safe’ is our health and safety initiative. It is more than just a logo, it creates a link between the work place and our home lives and encourages a state of mind which should be applied to everything we do at work and at home.

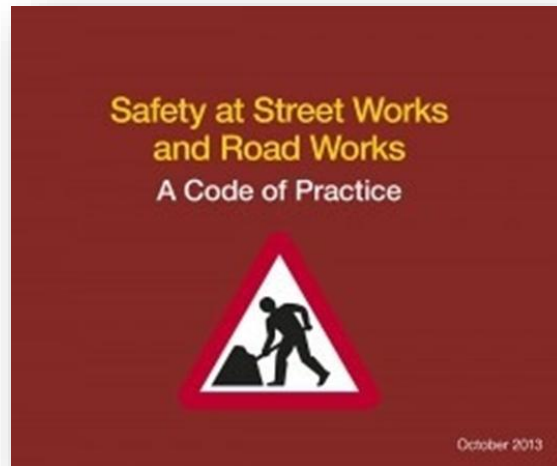


Network Management



Network Management

- Local traffic authorities must manage their road network to make sure that traffic can move freely on their roads and on the roads of other traffic authorities.
- Road works and planned events
- Unplanned events
- Congestion hotspots
- And all authorities have to appoint a Traffic Manager.



What causes delays?

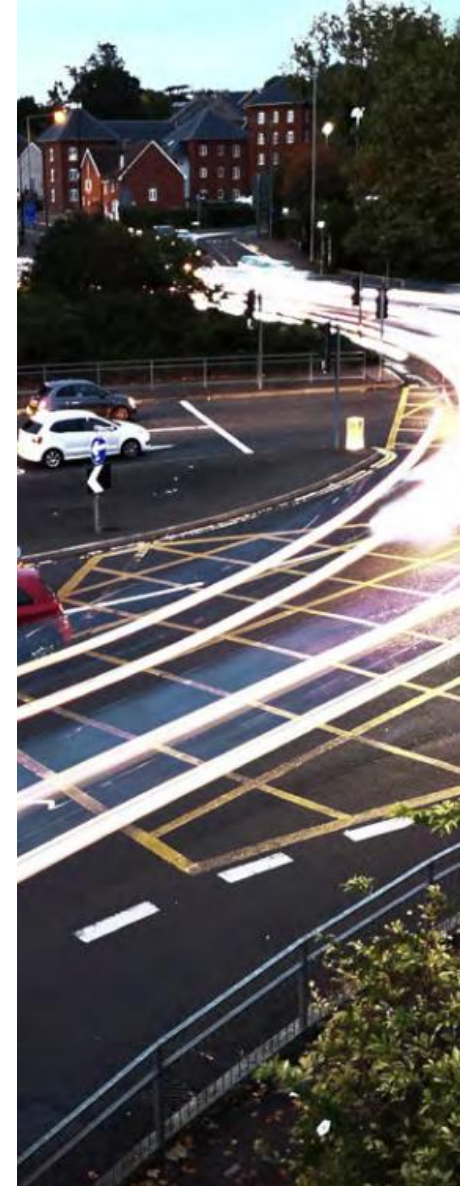


Asset Management



Asset management

- The Essex Highway asset covers:
 - Over 5,000 miles of roads
 - 1,600 bridges and other structures
 - 4,000 miles of Public Rights of Way
 - 132,000 street lights
- It is the seventh largest network in the country and has some of the heaviest traffic flows.
- Natural deterioration, increased traffic volume and environmental impact, such as extreme weather, means that the asset deterioration is a significant challenge for the service – a challenge faced by all local authorities.
- Our Asset Management approach and strategy is all about planning ahead to maximise the use of our resources, protect the existing infrastructure and prioritise works for the best long-term benefit.



What are our Assets?

- 'Assets' is the term we use to describe all the items and property managed within highways' area of responsibility. Overall, ECC Highways assets are worth £10 billion and are the highest value asset ECC owns.

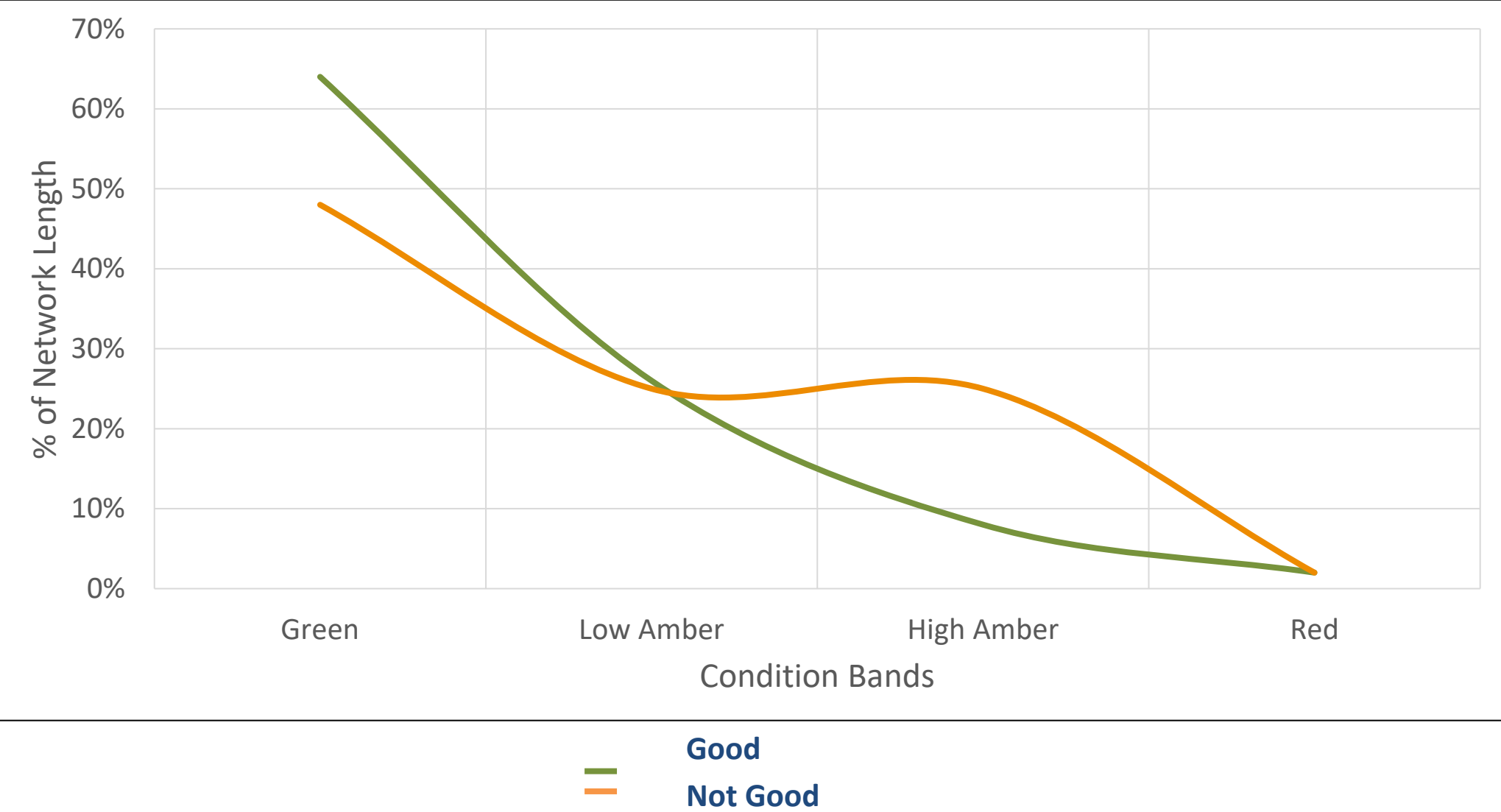
Major Asset Groups	
Roads	Street Lights
Footways	Traffic Signals
Bridges	Drainage

Why follow an Asset Management approach?

- If you had a house with wooden windows would you:
- Paint them regularly to stop them rotting?
- Let them rot and replace them:
 - **With UPVC?**
 - **With wood?**
 - **With aluminium?**



The Preventative Approach



How does this help us make decisions?

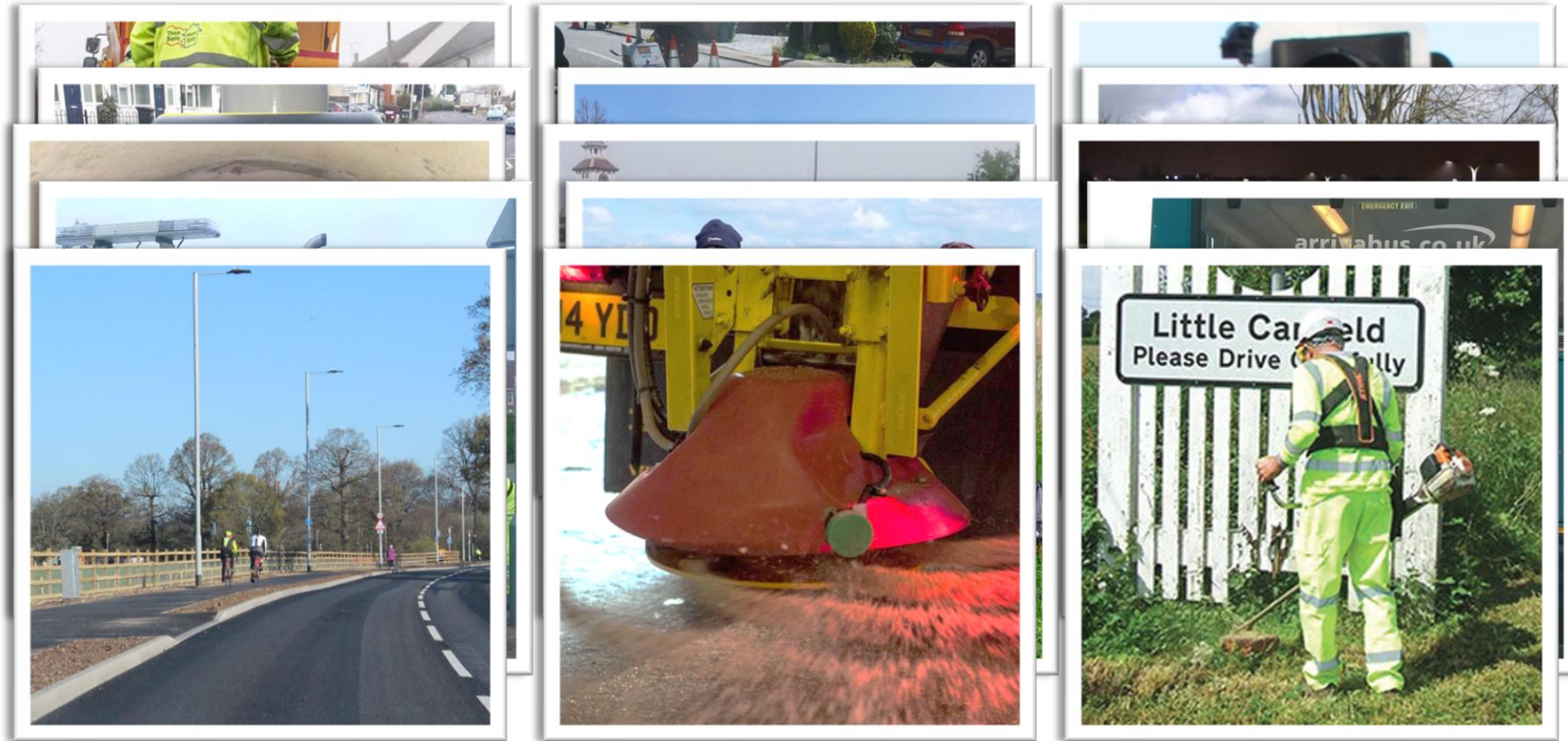
- Decisions are made using data. The data we collect includes:
 - Annual condition surveys
 - Inspections
 - Adhoc specialist surveys and reports
- We also assess defect data reported by the public



Reactive Maintenance Service



Many delivered revenue reactive services



Over 300 vehicles,
including more than
50 gritters

Over 600
employees, mix of
operatives and
specialist groups

Over 5,000 miles of
road; 4000 miles of
ProW & 4,000 miles
of footway; 1,600
structures and
132,000 streetlights



Carriageway repairs

The most talked-about element of our work is carriageway repairs, particularly repairing defects that most people call 'potholes'.

We have gangs out daily, effecting repairs both in the road and on footways. Sometimes, we carry out a 'make safe' repair, until time and resources allow us to carry out a permanent repair.

Explaining 'make-safes'

Play video: <https://youtu.be/bCHfmBgTGZs>



Emergency / out of hours work

We deliver the 'out of hours' (weekends/overnight) highways emergency service across the county, working with Emergency Services as necessary too, dealing with things like:

- Dangerous defects that need immediate attention
- Sudden collapses
- Fallen trees and significant highways flooding
- Fuel spills
- Clean-up and repairs following incidents



Winter Maintenance

Gritting Route Criteria:

- The County Roads – PR1s & PR2s
- Access routes to Hospitals, Fire Stations and Ambulance Stations
- Public Service Bus Routes (4 or more a day – 5 days a week)
- Sites where there have been 3 or more personal injury accidents within a 3 year period, where frost/ice on road surface was a contributory factor
- Access routes to main settlement of a Parish of 50 or more households



Street Lighting



- Target for lighting is 97% of lighting stock working as planned
- Includes electrical and structural testing of all lighting stock
- Clean and change signs, bollards, subways/underpasses
- Programme to replace sodium lanterns to LED complete saving energy and money

Flooding - causes

Flooding happens in Essex; when it does it can happen quickly, threatening lives, homes and businesses.

Floods develop from:

- *Sudden, heavy, localised rainfall* – high water volumes - local drainage cannot cope
- *Longer, but less intense rainfall* - swelled watercourses eventually overflowing
- *High coastal and river tides* – stops inland water flowing away
- *Broken pipes*, especially large water mains
- *Malfunctioning land drains; pumps; gullies; flood-gates etc* (all designed to mitigate flooding)



ECC's role in flooding

ECC has statutory obligations and powers, covering (broadly) two areas.

1. *ECC, as the 'Lead Local Flood Authority' (LLFA), has a strategic responsibility to oversee and manage flood risk from rainfall, surface water and groundwater.*
2. *Highways, as a 'Highway Authority' (HA), has duties and powers for flood control on the publicly maintainable highways that ECC is responsible for. However Highways England are responsible for highways drains on their roads in Essex: A12; A120; M11; M25.*

Each year, ECC agrees the budget and Highways produce a plan covering:

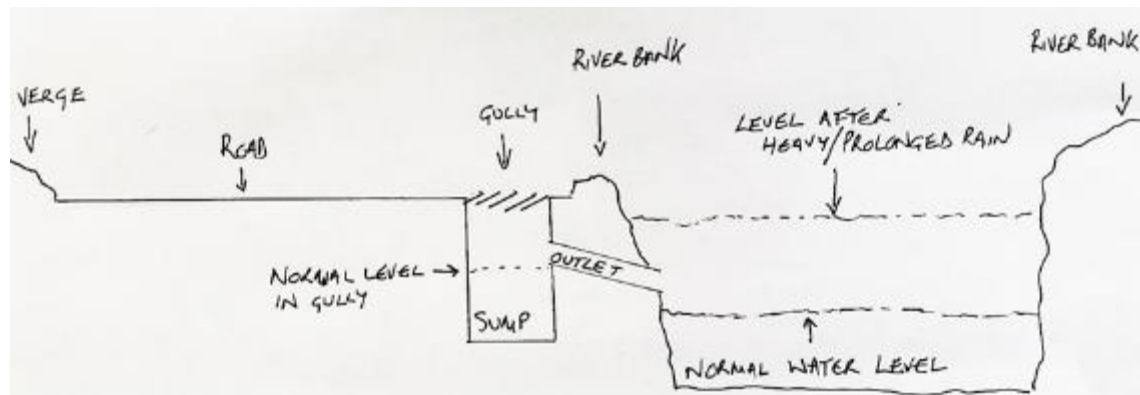
- Gully cleansing
- SWAS schemes (surface water alleviation schemes)
- Planned pre-surfacing jetting and investigation
- Highways flooding emergencies

Drainage – a shared responsibility

River, stream and coastal area flooding is the responsibility of the Environmental Agency

Some drainage outlets are also the responsibility of the appropriate water company

Private land owners are responsible for the drainage from their land and have a duty to ensure drainage ditches on their land are kept clear to ensure roads and pavements do not become flooded



Gully cleansing



‘Gullies’ are the roadside drains you see.

- We have more than 311,000 inc. ‘catch-pits’
- We also know of more than 36 miles of combined kerb/drainage channels

We are currently funded to deliver a single annual cleanse to all county PR1 and PR2 roads plus an element of local roads

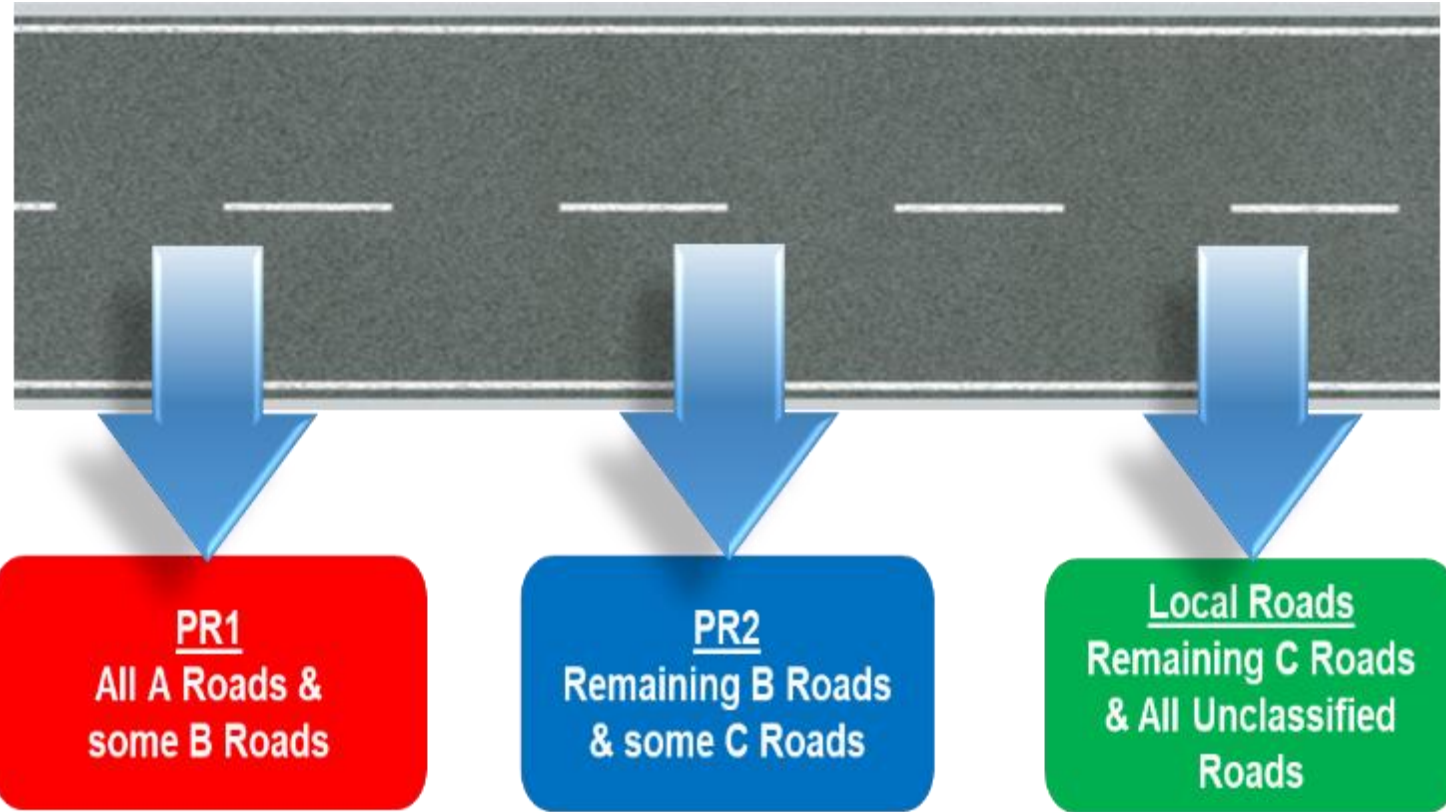
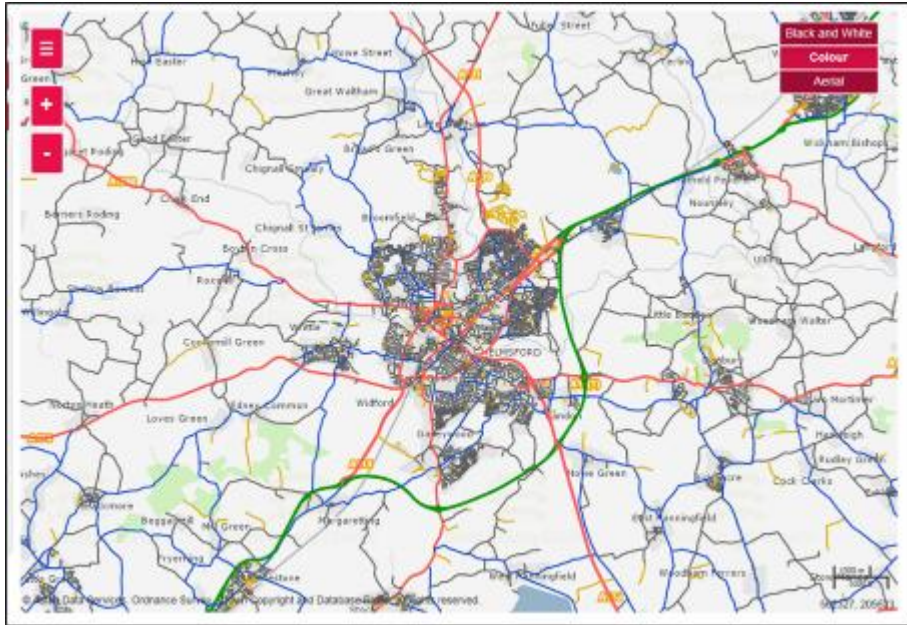
Assets on local roads do not receive a routine cleanse every year. However, some receive a cleanse following our defect resolution requirements, or when flooding has occurred.

- We deliver additional cleanses at known vulnerable locations/ flood hot spots e.g. Canvey Island; areas within Essex County Council approved Flood Management Plans etc

Inspections



Roads hierarchy



Find out which priority each of our roads is, [here](#) (select 'highway and footway network' from the menu/Categories)

How we identify defects

Routine safety inspections

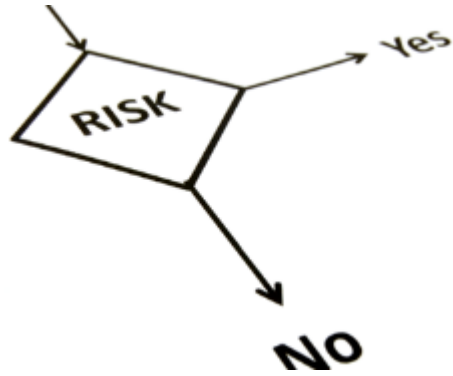
- Frequency based on hierarchy of road
- Walked or driven
- Log all defects and assess overall condition

Enquiries

- Customer Enquiries; try to assess within 28 days unless urgent
- County Member enquiries usually within 10 Days



Risk Assessments



What does the risk assessment comprise?

The **likelihood**:

- Probability of someone encountering or interacting with the defect identified
- Measured on a scale of 1 to 4:
 - 1 – up to 40%
 - 2 – 41- 60%
 - 3 – 61- 80%
 - 4 – over 81%

Risk Assessments

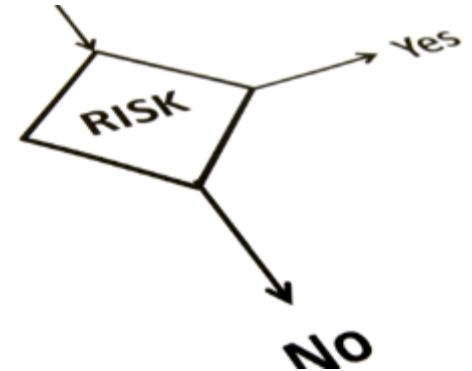
What does the risk assessment comprise? (continued)

The **consequence**:

Likely impact if the risk becomes an incident.

It is subjective but is also measured on a scale of 1 to 4:

- 1 – minor or low
- 2 – noticeable
- 3 – major, high or serious
- 4 – extremely high or dangerous



Risk assessment matrix

The risk factor is the combination of likelihood and consequence assessments multiplied together. This will produce a range of scores from 1 to 16.

It is this score that identifies the seriousness of the risk and consequently the appropriate level of response.

		Likelihood			
		Very Low 1 (up to 40%)	Low 2 (41-60%)	Medium 3 (61-80%)	High 4 (over 80%)
Consequence	Negligible 1	1	2	3	4
	Minor 2	2	4	6	8
	Noticeable 3	3	6	9	12
	Serious 4	4	8	12	16

[Read our Maintenance and Inspection Strategies here](#)

Defect Response Schedule

County Route carriageways or footways		Local Route carriageways or footways		Non-carriageway or non-footway assets	
Priority response	Response Time	Priority response	Response Time	Priority response	Response Time
S1 (score 16)	2 hours*	S1 (score 16)	2 hours*	S1 (score 16)	2 hours*
S2 (scores 8-12)	2 working days*	S2 (scores 8-12)	5 working days*	S2 (scores 8-12)	If an S2 defect is in the carriageway the response time will be inherited from the carriageway hierarchy S2. If the S2 defect is in the footway the response time will be inherited from the footway hierarchy S2.
S3 (scores 4-6)	Defect to be considered for repair as part of a planned maintenance programme	S3 (scores 4-6)	Defect to be considered for repair as part of a planned maintenance programme	S3 (scores 4-6)	Defect to be considered for repair as part of a planned maintenance programme
S4 (scores 1-3)	Presumption not to undertake repair within a stated time period	S4 (scores 1-3)	Presumption not to undertake repair within a stated time period	S4 (scores 1-3)	Presumption not to undertake repair within a stated time period

* Where an S1 defect may require follow up treatment to affect a permanent repair, this will be undertaken as Priority 3 (S3) defect.

Inspections – Public Rights of Way (ProW network)

As well as 5000 miles of roads, we are responsible for circa 4000 miles of Public Rights of Way

We use public reports and volunteer activity to help us identify the most urgent things to inspect, fix or maintain

[Find out more about our Public Right of Way \(PRoW\) network here](#)

Streetworks

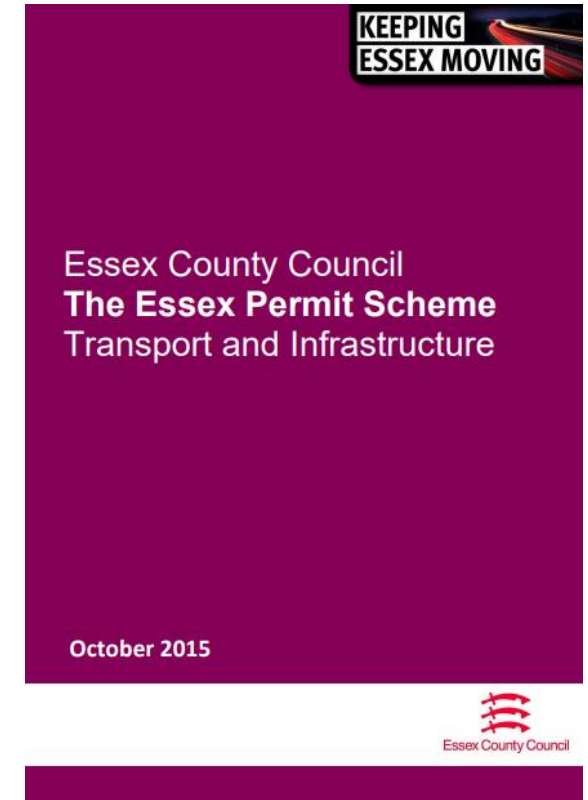


Streetworks



Streetworks

- Essex Permit Scheme has been operational since 1st April 2015.
- Typically each year:
 - 70,000-100,000 Permit Applications.
 - > 3,000 TTRO applications (Planned Road Closures to assist with completion of roadworks – these use Temporary Traffic Regulation Order which requires advertising).
 - c.2,000 TTRNs (Immediate Road Closures to assist with emergency roadworks – these use a Temporary Traffic Regulation Notice, no advertising needed).
 - >56,000 Inspections of roadworks sites, mainly utilities.



Streetworks – team aims

- ✓ Protect the highway asset
- ✓ Enhance safety for the public
- ✓ Minimise delays, congestion and frustration
- ✓ Minimise clashes, encourage co-ordination

The Essex County Council Permit Scheme

- Works promoters must seek permission for works
- We can charge for a permit which covers the costs to run the scheme
- We can place conditions on a permit
- We can fine those breaking those conditions
- Permit officers undertake checks for permit requests



Emergency works

In the case of Emergency works – such as a burst water main, power cut or gas leak - the utility does not have to ask for a permit, but they must inform us within 2 working hours.

The legislation defines an end to the working day of 16.30, so any works after this time, we will be informed the next working day



What utilities works do we inspect and why?



- A Type - 10% of all works are inspected while being carried out.
- B Type – 10% of all completed sites - inspection taking place between 0 to 6 months following completion.
- C Type – 100% of all works are inspected between 21 and 24 months.

A works promoter is permitted to complete a job to an interim standard and maintained for up to six months before a site is completed to a permanent standard.

What is a streetworks defect?



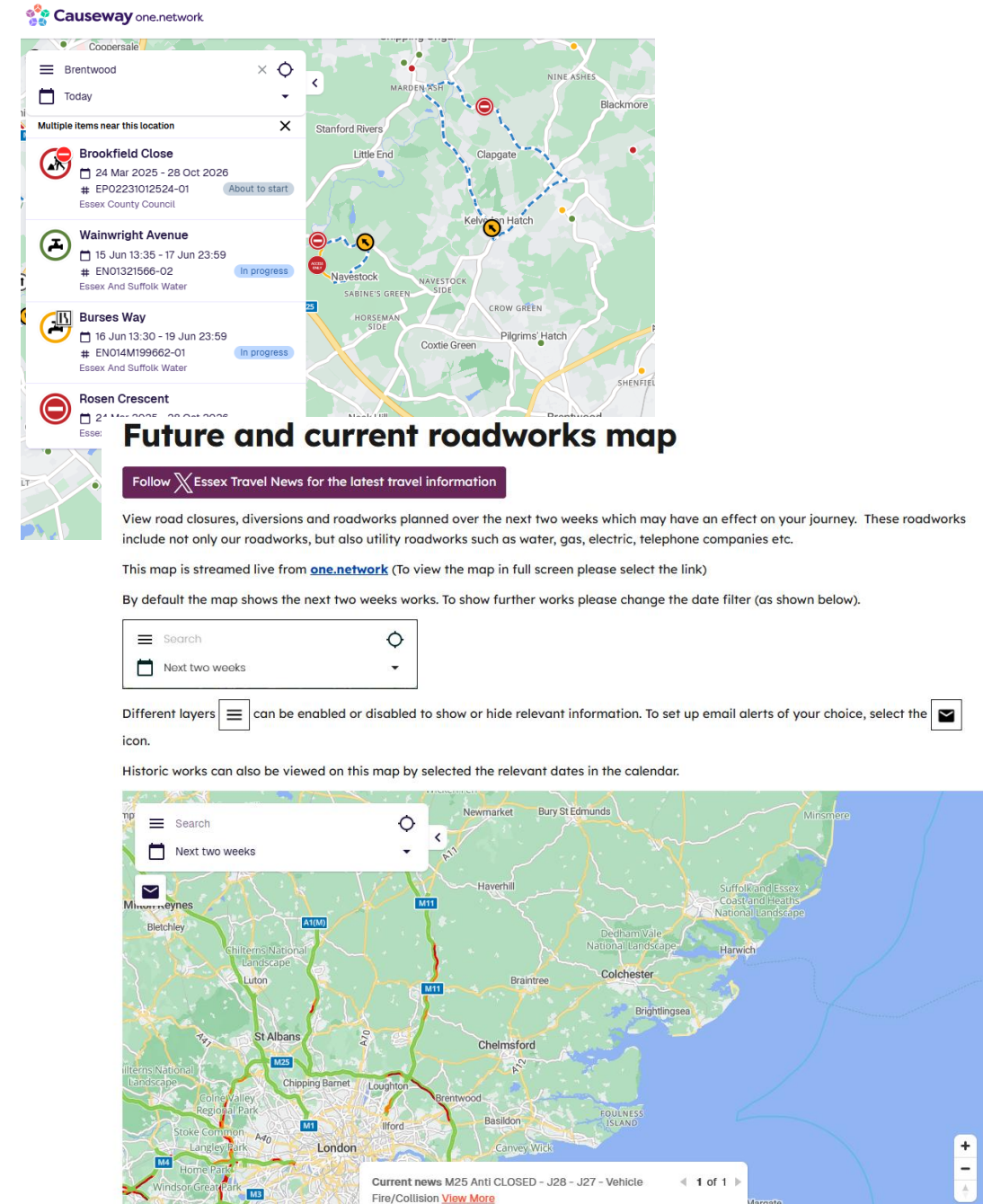
Any reinstatement or traffic management that does not reach the required standard as by the code of practice for the reinstatement in the highway and Safety at Street Works and Road Works(The Red Book).

Communications



What is One.Network?

- One.Network is a platform used to plan and show all current and upcoming works happening across the network in Essex.
- It includes works being carried out by Essex Highways, National Highways, developers and utility companies.
- You can set up a profile on One.Network to receive regular updates of upcoming works happening in an area of your choice over the next two weeks.
- One.Network is also used on the Essex Highways website



The screenshot displays the Causeway one.network interface. On the left, a sidebar lists upcoming roadworks with icons for closure, diversion, and lane narrowing. The main area shows a map of Essex with roadworks highlighted in red and blue. A search bar and a date filter are visible at the top of the map area.

Future and current roadworks map

Follow  Essex Travel News for the latest travel information

View road closures, diversions and roadworks planned over the next two weeks which may have an effect on your journey. These roadworks include not only our roadworks, but also utility roadworks such as water, gas, electric, telephone companies etc.

This map is streamed live from [one.network](#) (To view the map in full screen please select the link)

By default the map shows the next two weeks works. To show further works please change the date filter (as shown below).

Search   Next two weeks

Different layers  can be enabled or disabled to show or hide relevant information. To set up email alerts of your choice, select the  icon.

Historic works can also be viewed on this map by selected the relevant dates in the calendar.

Search   Next two weeks

Current news M25 Anti CLOSED - J28 - J27 - Vehicle Fire/Collision [View More](#)

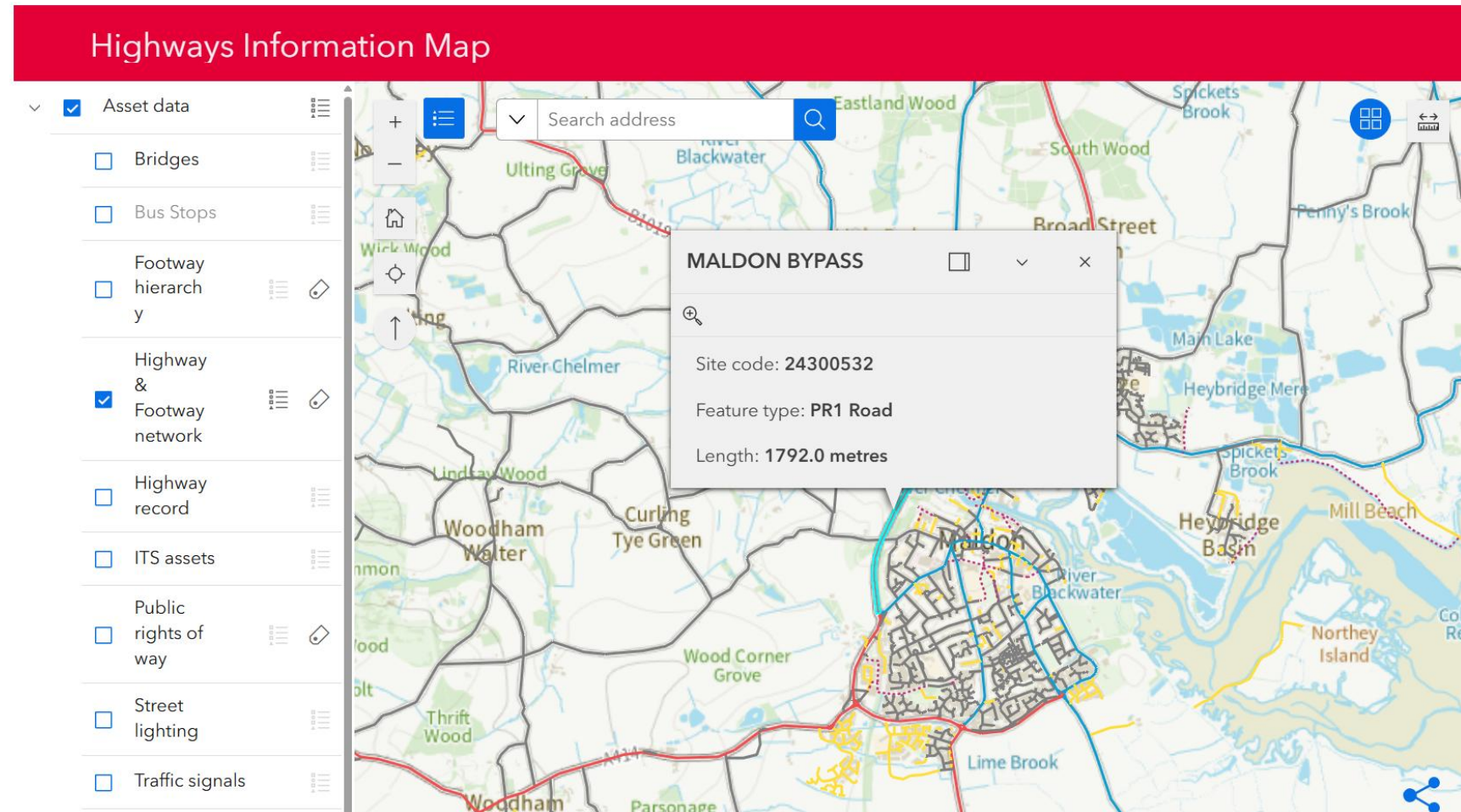
Essex Highways website

The Essex Highways website contains all the information regarding the highways service and how it operates. It's where issues can be reported to us. Some of the key functions of the site include:

WEBSITE FUNCTION	DESCRIPTION	BENEFIT TO USERS
Roadworks and Traffic Updates	Information on planned and emergency works, closures, and disruptions	Helps users plan journeys and avoid delays
Report a Problem	Online reporting of issues such as potholes and streetlight faults	Simple, direct way to raise and track highways issues
Projects and Maintenance	Updates on improvement schemes and maintenance programmes	Improves transparency and public awareness
Travel and Safety Advice	Guidance on road safety, weather impacts, and seasonal alerts	Supports safer travel for all road users
Permits and Services	Access to applications and permissions affecting the highway	Convenient access to essential highways services

Highways Information Map

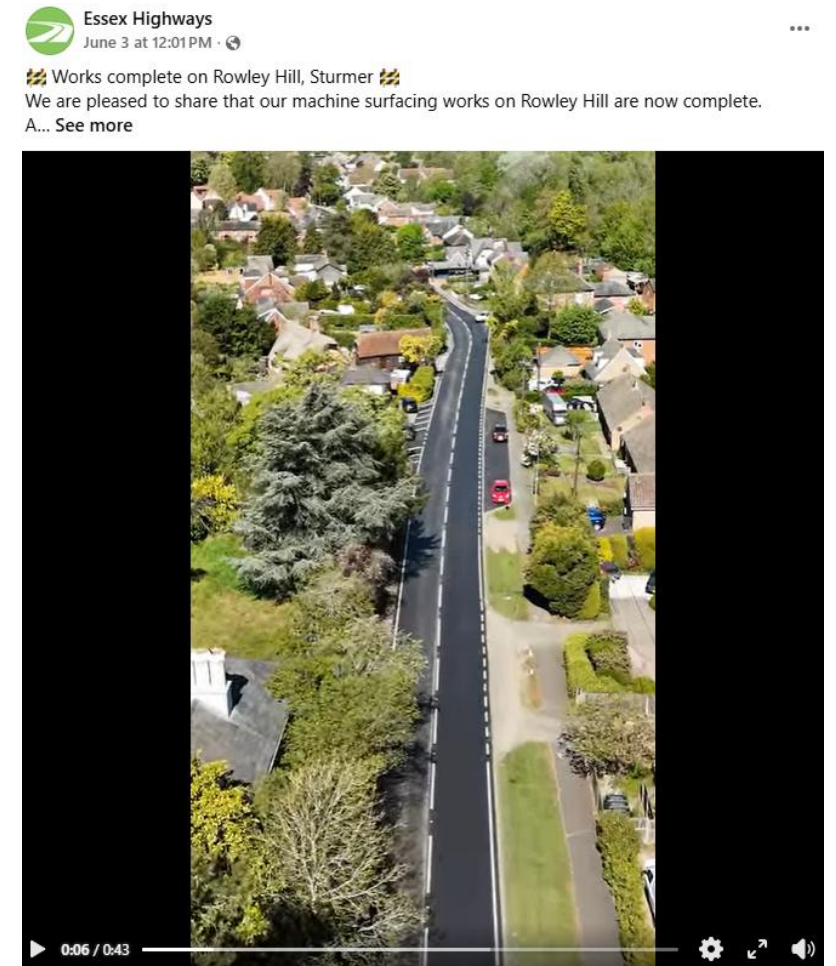
- Hierarchy available online:
- <https://www.essexhighways.org/highways-information-map>



Communications – What do we do?

Promote positive stories about the proactive and responsive response Essex Highways takes in dealing with maintaining the highways network in Essex and highlighting the work of the teams on the ground

The communications team produces promotional, educational and informative content for channels to keep the Essex public updated on key aspects of the role of Essex Highways. This includes news content on progress of maintenance programmes, specific high-profile schemes and seasonal updates regarding resurfacing, vegetation maintenance and the winter gritters.



Communications – follow us

Regular updates on highways announcements and news are available through the following channels:

- **Press releases** - issued via the Essex County Council press team.
- **Social media** - Make sure following us on www.facebook.com/essexhighways for the latest
- **Essex Highways website** - www.essexhighways.org
- **Updates to Members** – either via specific communication from the Cabinet Member, or via a new e-newsletter for Members currently in development



Essex Highways

9K followers • 103 following

The latest updates on repairs, maintenance and major transport projects on the roads across Essex.

If you are commenting on this page, please read the house rules:

<https://www.essex.gov.uk/social-media-house-rules>

Travel & Transportation



Following

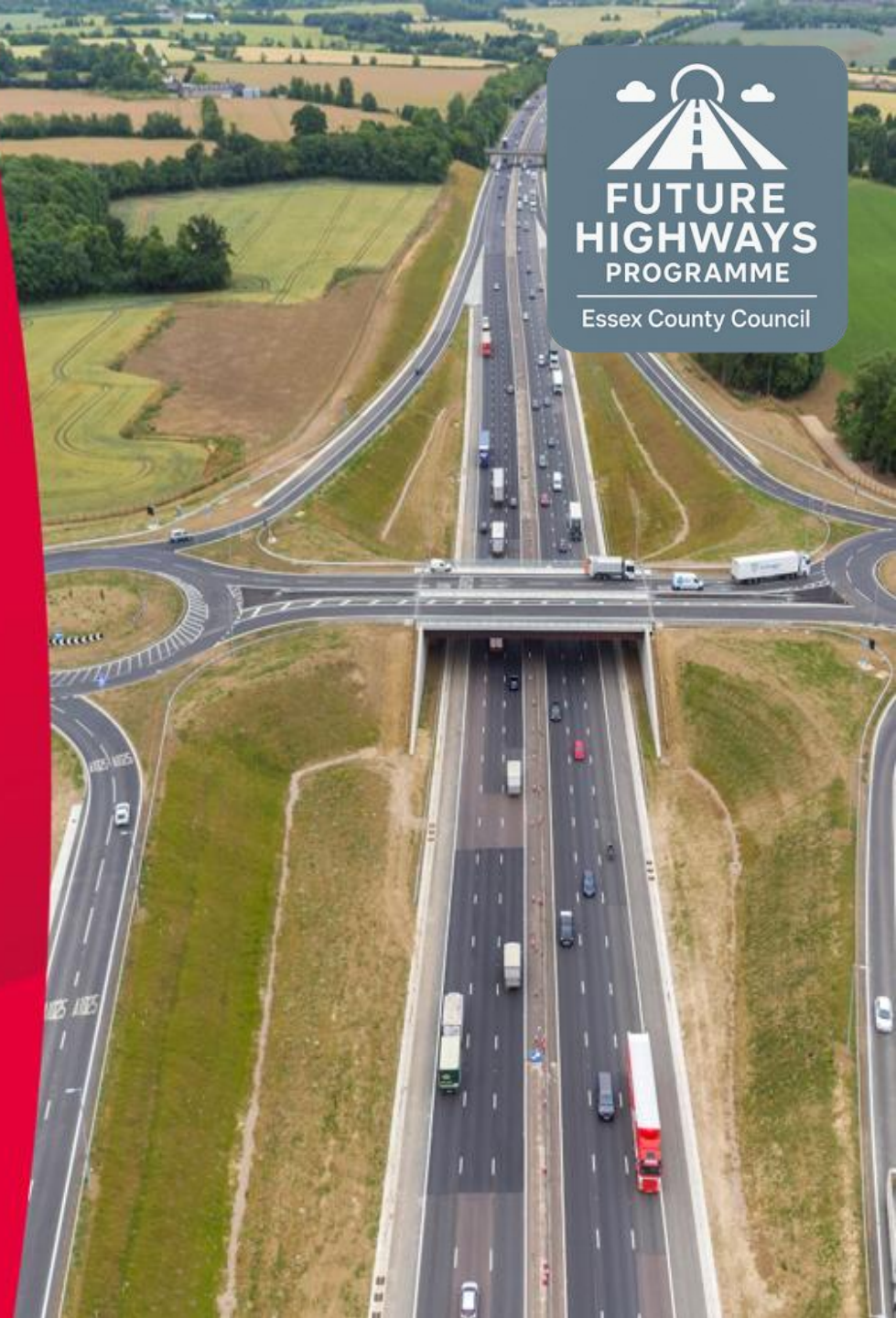
Search

Essex County Council declares 'pothole emergency' at meeting

28TH MAY LOCAL GOVERNMENT



Future Highways Programme



The Future Highways Programme

- ECC's present highways maintenance contract is with Ringway Jacobs and is set to expire on 31 March 2028 (after a 12-month extension was agreed by the previous Leader in March 2026, which took the end of the contract from 31 March 2027 to 31 March 2028)
- The Future Highways Programme sets out to procure a new contract following the expiration of the present one.
- The Council needs to have lawful arrangements in place from 1 April 2028 to ensure continuity of service.
- The Future Highways Programme has been established to procure a modern, resilient highways service that encompasses all of this and that:
 - Keeps residents safe, and the network legal, at all times
 - Is robust through Local Government Reorganisation
 - Can be safely inherited and operated by future Unitary Authorities

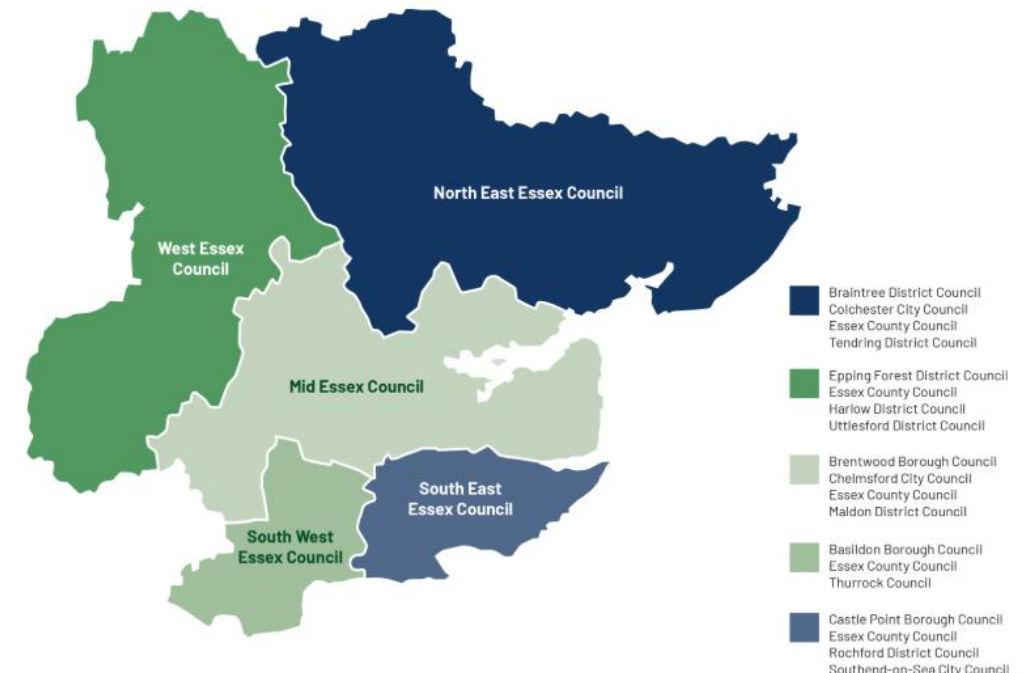


Political Decisions to Date

- Key decisions have been made to secure the safe and lawful continuation of highways services and to manage the transition through Local Government Reorganisation.
- Previous Cabinet decisions established the direction towards a stronger client model and revised service design.
- The programme has been subject to Scrutiny and formal assurance, confirming the approach and governance
- In March 2026, the previous Leader approved:
 - A 12-month extension to the current highways contract, ensuring service continuity while new arrangements are put in place
 - An approach to future procurement based on independent contracts, designed so that each future Unitary Authority can inherit and operate its own highways contract from vesting day
 - A decision to proceed to market
- As with programmes of this size and scale, the formal decision-making process will continue to shape and guide the work

Ongoing contract and service design & governance

- Local Government Reorganisation (LGR) introduces additional complexity to both the design of the future highways service and the transition from the current contract. The current assumption of a five-unitary structure means that responsibility for highways services will transfer from Essex County Council to the new Unitary Authorities.
- The Future Highways Programme has therefore been developed on a pragmatic planning basis, recognising the need to ensure a safe, lawful and stable handover of service responsibilities, while operating within a wider and evolving policy context.
- In response, there is a strong emphasis on:
 - Maintaining continuity of service throughout transition
 - Ensuring that future arrangements can be safely transferred and operated by successor authorities
 - Designing contracts and operating models that are aligned to the emerging Unitary Authority footprint, whilst retaining flexibility where possible



Being responsive to market feedback & specialist advice

- The programme has undertaken extensive market engagement, alongside input from mobilisation and delivery specialists, to test the deliverability and resilience of the proposed approach
- This feedback is being actively used to refine the procurement and mobilisation strategy ensuring a robust, competitive process and a service that can be safely and effectively transitioned to future arrangements
- The programme is taking a pragmatic and flexible approach, focused on securing the best possible outcome for residents, while ensuring service continuity and stability through transition
- The Programme team will continue to actively engage and update Members as we progress work on this complex programme to deliver important statutory services for our County.

Thank you

Head of Essex Highways Commissioning – Peter Massie

Head of Maintenance & Operations – David Forkin

Head of Strategy, Governance & Engagement – Kim Gisby