

HIGHWAYS HIGHLIGHTS

HHH

INFORMATION FOR LOCAL COUNCILLORS
JULY 2025

SAFER / GREENER / HEALTHIER

**INNOVATIVE
NEW TECHNOLOGY
USED TO REPAIR
THOUSANDS OF
METRES OF ROAD
IN ESSEX**

COMMENT

COUNCILLOR TOM CUNNINGHAM

**CABINET MEMBER FOR HIGHWAYS INFRASTRUCTURE
AND SUSTAINABLE TRANSPORT**

Welcome to this latest issue of Highways Highlights. In this edition we catch up with Essex Highways' use of Roadmender which we began trialling early last year, before we adopted its use in August 2024. Since then, it has been used to treat nearly 14,000 square metres (13,827 m²) of damaged road surface across Essex. Roadmender has been used alongside conventional pothole repair methods during a period of record investment by Essex County Council in the local road network. I'm delighted to report that this investment has already led to a significant decline in pothole-related complaints.

We also visit another trial which has captured the interest of the BBC, who paid a visit to Chelmsford on the evening of Wednesday 6 August to document the latest phase of the graphene surfacing trial which started in the summer of 2022.

It's great to see that Essex Highways is at the forefront of innovation when it comes to looking at ways in which we can improve the network by working smarter, greener and more cost-effectively for the residents of Essex.

Best wishes,
Tom



ROUTINE REPAIRS: July 2025

Please note: All drains on main roads are cleaned at least once a year over a two-year cycle. Drains on local roads are programmed for cleaning on a district by district basis.



FOOTWAYS:
966



POTHOLES:
991



**STREET
LIGHTS:**
1,330



**GULLIES
CLEANSED:**
15,505

MEMBER HIGHWAY INITIATIVE

High Level Report: August 11 2025

Request Status



Triage Result

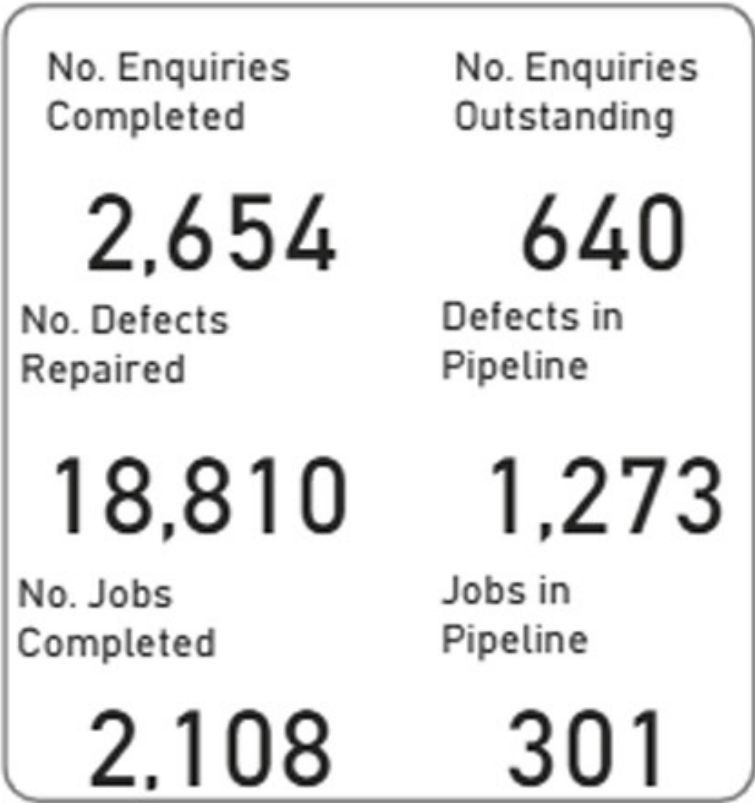
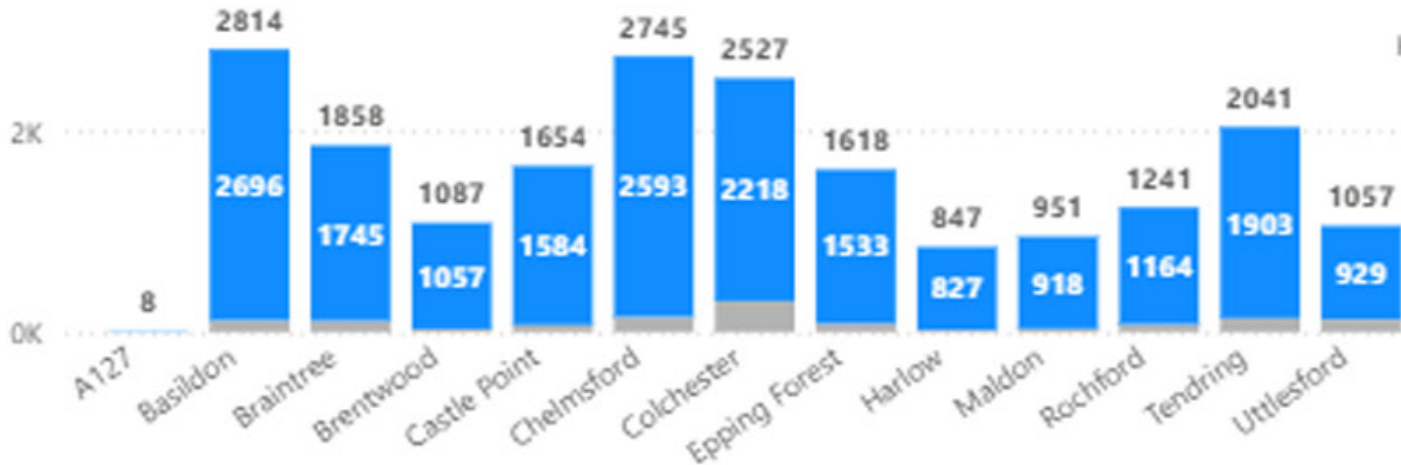
RAG assessment of difficulty of scheduling Member request.



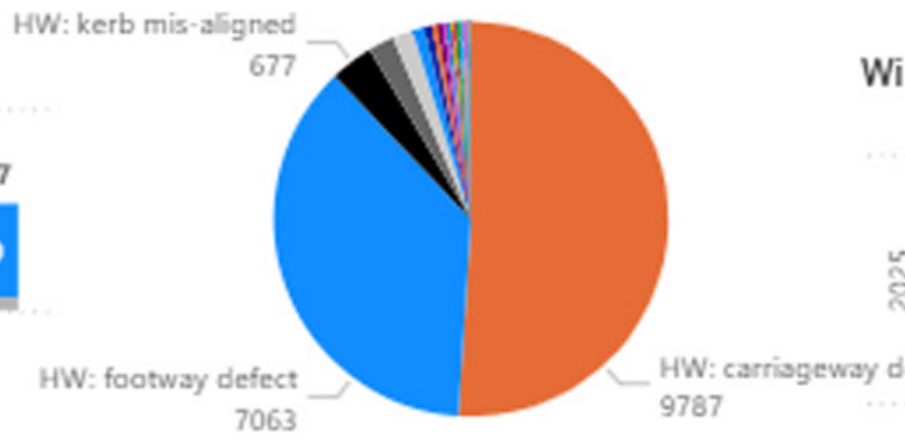
Defects by District

Shows defects that have been repaired and those programmed for repair.

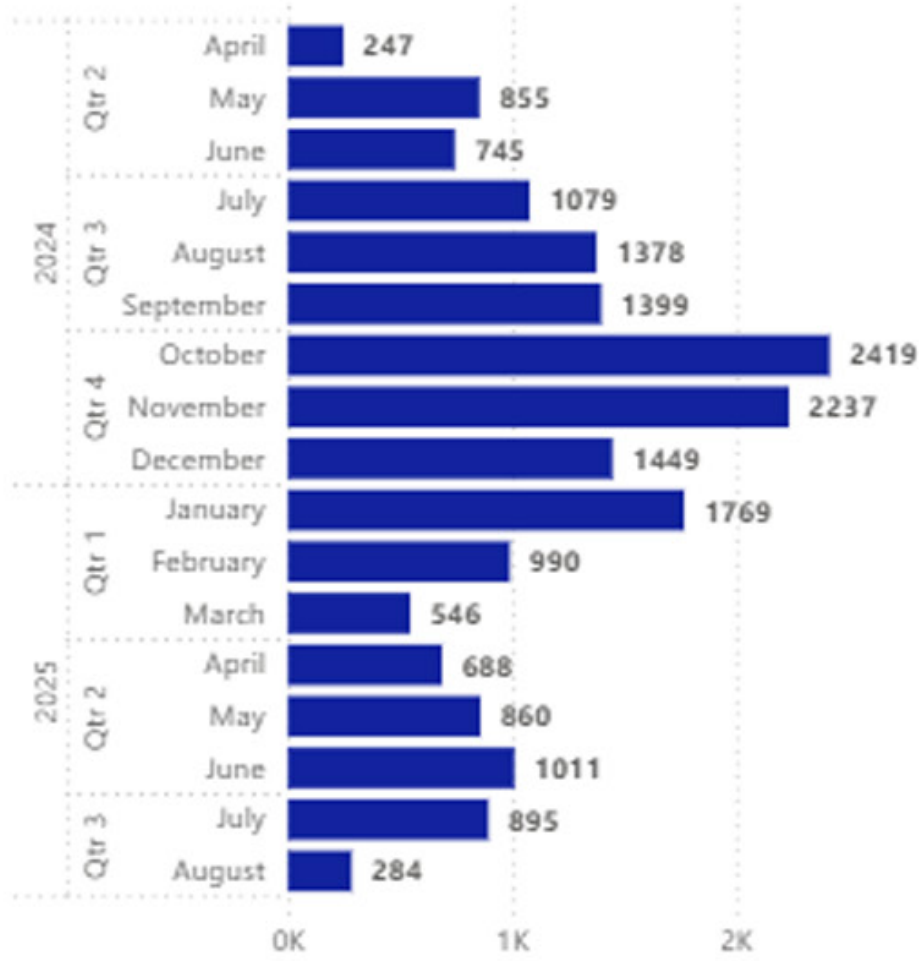
Defect repaired ● N ● Y



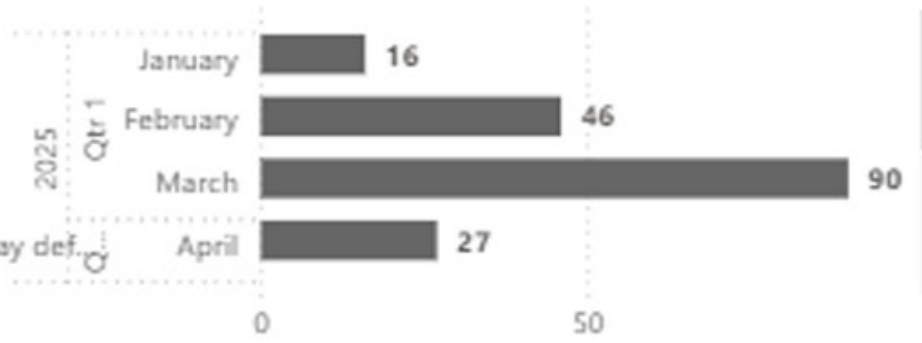
Repaired Defect Types



Defects Repaired by Month



Winter Damage Defects



Over the past year, Essex Highways has been using a system called Roadmender, which uses a highly durable and flexible material — partially made from recycled lorry tyres — to repair shallow potholes quickly and effectively.

The material, known as Elastomac, can be applied up to four times faster than traditional repair methods. Unlike conventional approaches, it requires no excavation and cools rapidly, allowing crews to move swiftly from one site to the next. This increases efficiency, minimises road closures and therefore reduces disruption for road users.

In addition to being faster and more cost-effective, the process is also greener. Because there's no digging or need to transport waste material off-site — and also thanks to the recycled content of Elastomac — the carbon footprint of each repair is reduced by up to 85% compared to traditional methods. Once applied, the adhesive, flexible compound bonds seamlessly with the existing road surface, preventing water ingress and significantly extending the road's lifespan.

Since being adopted for use in August last year, Roadmender has treated nearly 14,000 square metres (13,827 m²) of damaged road surface across Essex — roughly the size of two Wembley Stadium football pitches. It has been used alongside conventional pothole repair methods during a period of record investment by Essex County Council in the local road network. That investment has already led to a significant decline in pothole-related complaints.



**COST-EFFECTIVE,
GREENER, FASTER
ROADMENDER IS
IMPRESSING
DURING TRIAL
PERIOD**

Key initiatives include the intensive £25 million Priority One programme and the £8 million Member Highways Initiative (MHI), which gives each Essex County Councillor access to a dedicated Essex Highways crew to tackle the road issues that matter most to their communities.

The Priority One programme has delivered:

- 128 additional road resurfacings
- 824 drainage clearances
- 582 vegetation clearances
- 446 signage and bollard repairs
- 30 drainage system repairs

Meanwhile, the MHI has resulted in:

- 8,000 carriageway defect repairs
- 6,000 footway repairs, including kerbs and paving
- Replacement of signs, bollards, pedestrian guardrails, and surface covers

Councillor Tom Cunningham, Cabinet Member for Highways, Infrastructure and Sustainable Transport, said: “We’ve invested more than ever before to maintain and improve Essex’s road network — but it’s not just about spending money. It’s about delivering the best value for our residents. Roadmender is a great example of that. It’s quicker, less disruptive, highly cost-effective and more sustainable — all things our communities will welcome. We’ll continue to explore innovative technologies to provide the highest standard of roads for the people of Essex.”



SCIENCE AT THE CORE AS GRAPHENE TRIAL ATTRACTS INTEREST FROM BBC

The BBC paid a visit to Chelmsford on the evening of Wednesday 6 August to document the latest phase of the graphene surfacing trial which started in the summer of 2022.

The trial was undertaken to assess the potential benefits of adding graphene into carriageway materials. The site chosen was the A1016 / Chelmer Valley Road / Rectory Lane, Chelmsford, a busy, complex junction serving as one of the major routes into the city centre.

The material laid at this site in a Machine Surfacing operation was Hot Rolled Asphalt (HRA), making the inclusion of a graphene additive to HRA a first in the UK and one of the earliest examples of graphene being added to carriageway surfacing materials.

The graphene additive is called Gipave and has been developed by an Italian company, Iterchimica, in collaboration with Directa Plus and the University of Milan-Bicocca. Gipave is a graphene-enhanced asphalt supermodifier that uses graphene's exceptional strength and flexibility to greatly increase the asphalt's resistance to cracking and rutting, extending the carriageway's lifespan, and reducing the need for more frequent road maintenance.

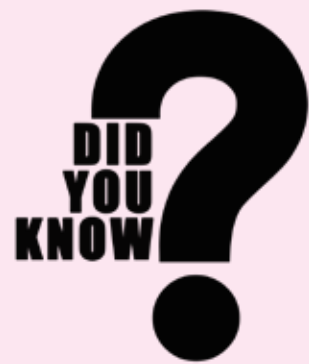


Laboratory tests have indicated that a graphene treated HRA carriageway's lifespan could potentially be increased to approximately forty years (On the proviso that appropriate skid resistance levels were maintained by conducting re-texturing works when necessary). Through this approach and the product's use of recycled plastics, carbon savings are made over conventional carriageway materials, helping to decrease Essex Highway's whole-life carbon outputs.

The trial conducted by Essex Highways in partnership with Eurovia, Jean Lefebvre (UK) and Iterchimica, is ongoing and the road surface is being continually monitored to ascertain how the treated carriageway is performing. Now that the treatment is three years old, core testing is being undertaken on both treated and control sections of the site and the samples will be analysed in a laboratory to see how the carriageway is performing structurally. The BBC attended to document the core sample being taken and will later visit one of Jean Lefebvre (UK)'s laboratories to find out more about the success of the trial once the core has been analysed.

All indications so far suggest that the treatment is performing very well, with signs of rutting (which typically affect Hot Rolled Asphalt carriageways) not being observed. Upon the results of the core testing, Essex Highways will investigate further sites with more stringent requirements (such as carriageways carrying significant industrial traffic) that the innovation can be applied to and also see if there are any other highway treatments that graphene could be used in.





ROAD SIGNS LEFT BEHIND ONCE WORKS ARE COMPLETED



It's a common misconception that Essex Highways is responsible for every piece of roadworks signage or traffic management equipment out on the network - indeed, we occasionally receive reports of discarded or left behind signs or get asked about why they haven't been collected.

Everyone who works for and on behalf of Essex Highways is expected to collect all traffic management when works are complete, although there can be exceptions for flood warnings or temporary traffic management if needed.

We are happy to collect any Essex Highways signs that may have been overlooked or moved from their original locations. Other items of discarded signage can also be reported to relevant District Councils too if considered to be litter.

A-frames are widely used by anyone working on or near a public highway including utility companies and developers and we can't take responsibility for signs that aren't ours. For example, Essex Highways' own-works accounted for 8341 out of 60399 granted permits - about 14% of all the works that took place on the highways in Essex during the last financial year.

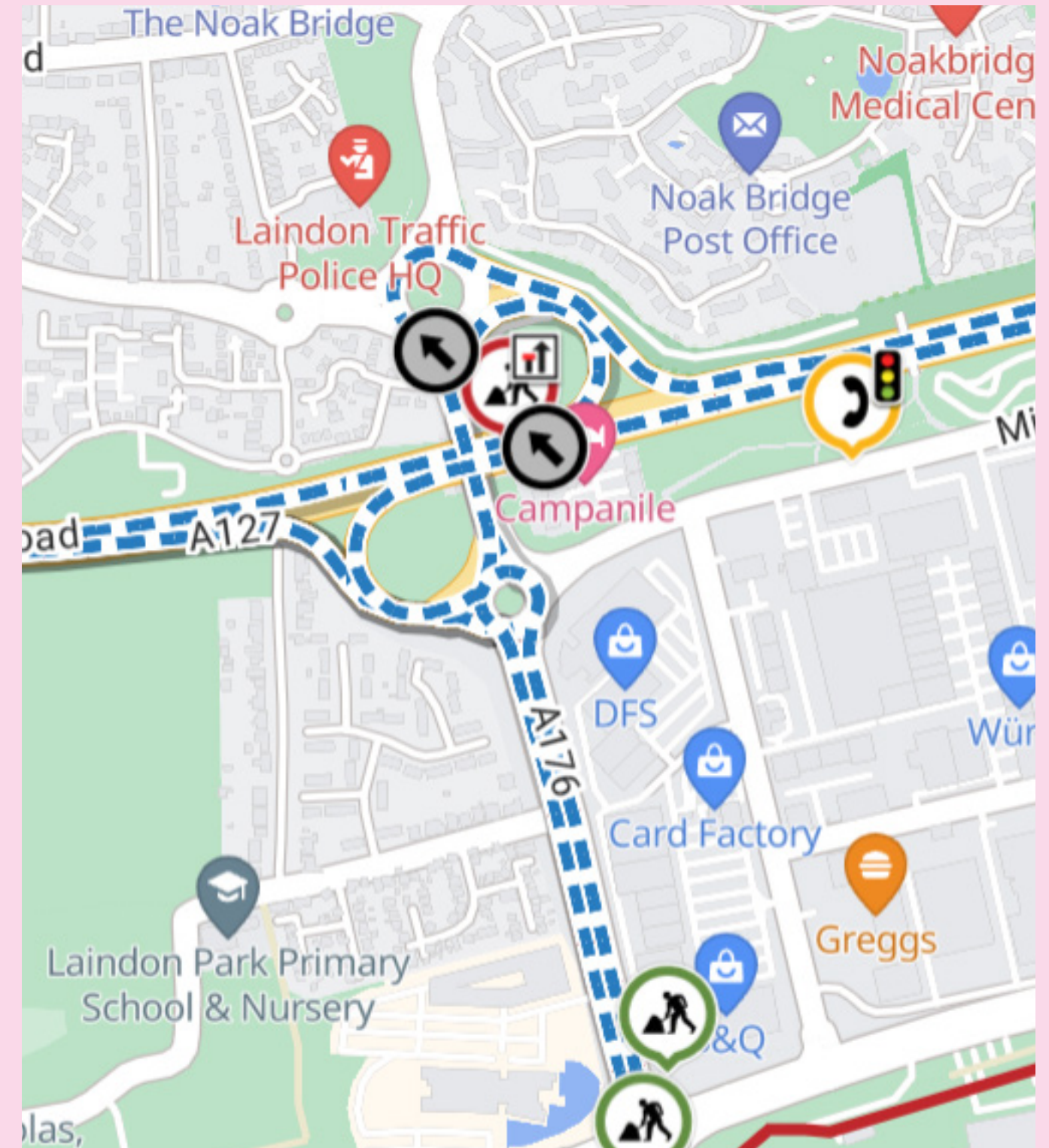
AROUND THE COUNTY

FORTUNE OF WAR FOOTBRIDGE REFURBISHMENT

Refurbishment works are planned for the Fortune of War Footbridge, which provides a pedestrian crossing over the A127 Southend Arterial Road in Basildon. Activities will involve pressure washing the structure to remove loose paint and prepare the steelwork for repainting. In addition, small welding repairs will be carried out, and the nonslip surfacing will be replaced to improve safety and durability.

Work is scheduled to begin on 25 August 2025 and is expected to take approximately six weeks to complete. During this period, the footbridge will be fully closed to pedestrians, with a temporary diversion route in place via Willowfield and High Road North. To facilitate the refurbishment, overnight closures of the A127 Southend Arterial Road will be required between 9pm and 5am for the first two weeks. Diversion routes will be clearly signposted to assist drivers during these times.

Following the overnight closures, nightly lane restrictions will be in effect for a further four weeks. During these periods, one lane of traffic will remain open in each direction to maintain flow while works continue. Outside of these hours, the A127 will remain fully open to traffic. Letters have been sent to residents/businesses to provide advance notice, and to warn them of potential noise during this period. **Details are also available on One. Network.**



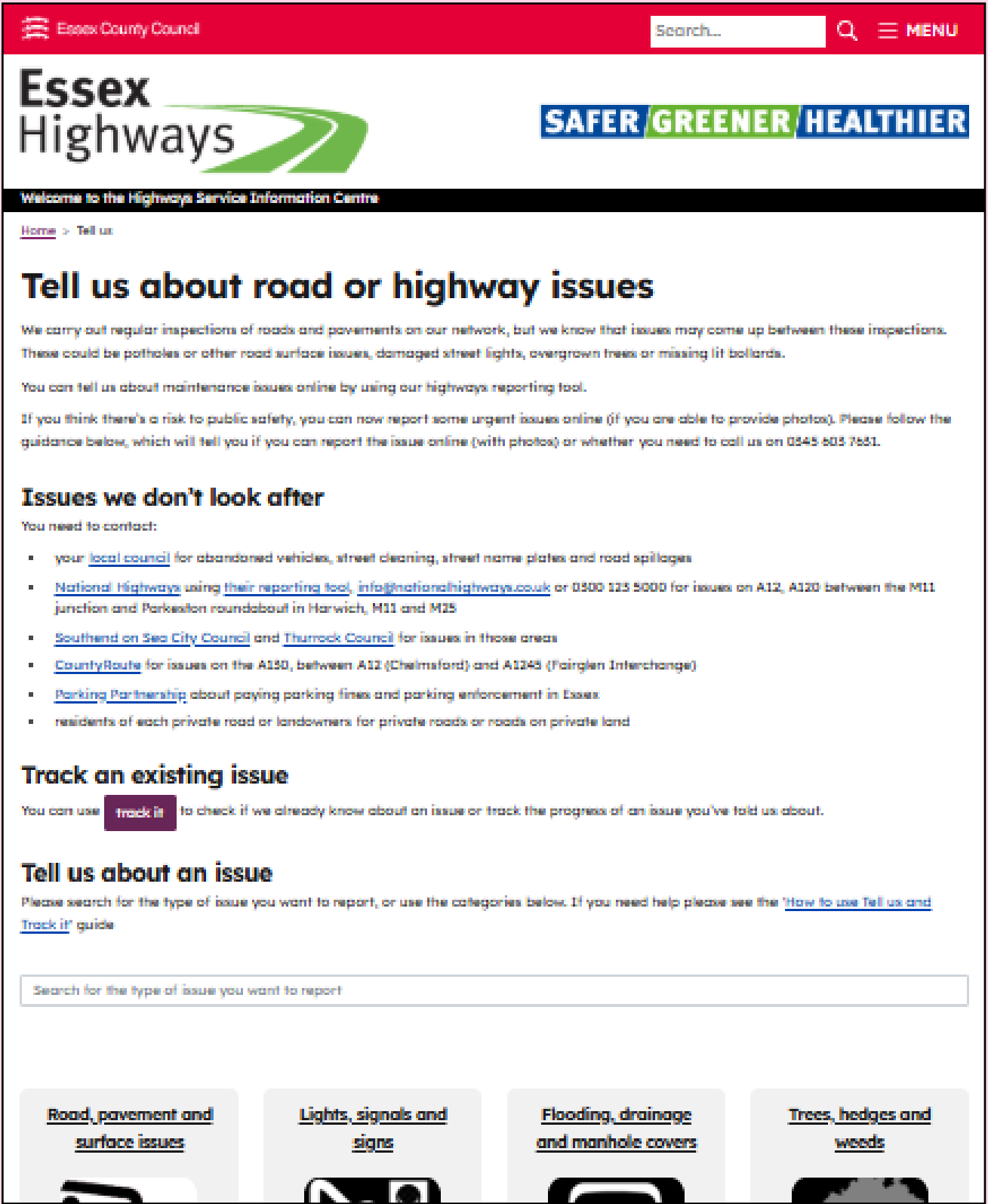
EASIER THAN EVER TO REPORT HIGHWAYS DEFECTS IN ESSEX

Residents and road users have more options when reporting road defects following a major update by Essex Highways. The update comes as users will no longer be able to raise issues via third-party sites, such as Fix My Street, from 1 January 2025 due to the lack of detail they provide inspectors.

The **‘Tell Us’ webpage** by Essex Highways has been tailored to capture all necessary information. This now includes different types of emergencies and if issues have worsened over time. **The ‘Track It’ webpage** lets users see the progress of reports, from inspection to repair, and whether similar issues have already been raised.

Issues logged through third-party platforms are often duplicates of reports already received via Tell Us, or unrelated to the roads managed by Essex Highways. By moving exclusively to Tell Us, Essex Highways can ensure the 50,000 reports received annually are managed in one place, resulting in a faster and more transparent process.

Councillor Tom Cunningham, Cabinet Member for Highways, Infrastructure and Sustainable Transport at Essex County Council, said: “We are committed to streamlined and efficient services throughout the council to provide value for residents, and our highways are no exception. By using Tell Us, residents can be confident their concerns are handled directly and that they will receive updates along the way.”



USEFUL CONTACTS

Whatever the weather, you never know when the unexpected might occur. Should there be instances of fallen trees, power outages, flooding etc, help and support can be found below:

IN AN EMERGENCY

If you think there's a risk to public safety, do not report it online, please call us immediately on 0345 603 7631 or if you have hearing problems you can use our text phone service on 0345 758 5592.

FALLEN TREES

To report a fallen tree that is obstructing a highway please contact Essex Highways:

<https://www.essexhighways.org/tell-us/trees-hedges-and-weeds>

To report a fallen tree on a highway that is a risk to public safety call: 0345 603 7631

POWER CUTS

In the event of a power cut in your area, report to UK Power Networks by calling 0800 31 63 105 or simply 105. You can also report and check power cuts in your area at ukpowernetworks.co.uk/powercut

FLOODING

You can keep an eye on flood warnings here;

<https://check-for-flooding.service.gov.uk/>

Essex County Council is the local flooding authority:

<https://www.essex.gov.uk/floods-emergency-planning>