



# Essex Highways Annual Plan 2023-2024

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# Foreword

In 2012, Essex County Council (ECC) appointed Ringway Jacobs as its strategic partner to manage and maintain the county's highways network and much has been achieved. Asset knowledge supported by accurate data has helped focus our resources to improve our main roads and network assets. Ringway Jacobs was awarded a full, five-year contract extension in February 2020, ensuring continuation of service until 2027.

**Investment in transport infrastructure, services and initiatives is an important aspect of ECC's Everyone's Essex strategy. This sets out 20 commitments divided into four key areas - economy, environment, health and family.**

Ensuring a Safer, Greener, Healthier highways network is a desired outcome of ECC's focus on achieving longer-term future economic growth and meeting the technological challenges facing transport in Essex. To do this, ECC is delivering vital highways and transportation services. It is also investing in new and improved transport infrastructure, while leading campaigns and initiatives to encourage people to travel more sustainably.

ECC's over-arching Safer, Greener, Healthier initiative is in line with recommendations from the Essex Climate Action Commission. Initiatives include introducing, supporting and funding various projects across Essex such as creating new walking and cycle paths as part of the Active Travel Fund and trialling e-scooters.

ECC has successfully bid for funding from the Department for Transport, enabling the transformational creation of safe walking and cycling routes in Essex. The aim is to make it as easy as possible for people to travel more sustainably - walking, cycling, e-scooter or taking the bus or train - especially for shorter journeys.

Our progress has been enhanced by the effectiveness of the award-winning strategic partnership between ECC and Ringway Jacobs, working together as Essex Highways. 2022 saw the beginning of Ringway Jacobs' maximum five-year extension to the original 10-year highway network management contract, running until 31 March 2027. This decision demonstrates the benefit that ECC sees in the unique value that Ringway Jacobs brings to the council and the Essex public through its integrated, asset management-led highways solutions.

The Essex Highways partnership benefits from the support, expertise and experience of portfolio holder, Cllr Lee Scott who has jurisdiction over Highway Maintenance and Sustainable Transport. His remit includes:

- Rail Strategy and Community Rail
- Park and Ride
- Network Management
- Traffic Regulation
- Cycling
- Walking



## Councillor Lee Scott

Cabinet Member for Highways  
Maintenance and Sustainable Transport

- Street lighting
- Public rights of way (bridleways, footpaths and byways)
- Road safety
- Maintenance of highways
- Highways Maintenance capital programme
- Local Highways Panels
- Parking Partnerships
- Integrated Transport
- Sustainable Transport Policy
- Active Travel
- E-Scooters
- Travel Planning
- Flood Management
- Flooding
- SUDS
- Passenger Transport, including buses and concessionary fares
- Home to School Transport
- School Transport Awards
- Ports

Essex Highways has a huge role to play in the way that we support the county's mobility needs. We are delivering Safer, Greener, and Healthier travel options for all.

# Introduction

This Annual Plan provides an overview of how Essex Highways delivers task orders to budget as detailed in the individual Service Plans for 2023-24. It also highlights service delivery achievements and priorities for this year



**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.**

Essex Highways comprises both ECC and Ringway Jacobs people who are totally integrated throughout all levels of the service. The partnership delivers an integrated service supported by direct-resource and over 100 supply chain partners, the majority being Essex-based.

The Essex Highway asset covers over 5,100 miles of roads, 1,600 bridges and other structures, 4,000 miles of Public Rights of Way and 131,000 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 can't be maintained within existing budgetary constraints - 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. Our aims for the service are as follows:

- Deliver a common vision, working collaboratively, seamlessly and with integrity and transparency
- Engage with our transport network users and provide them with the right information to help shape Essex priorities
- Ensure everything we do supports the drive towards a greener Essex, promoting options that have a positive impact on everyone's health
- Prioritise a safe environment for everyone travelling or working on our network, including safe design, delivery and use
- Optimise our resources through efficiency and innovation to deliver the best possible outcomes while continuing to build future service resilience
- Support the economic and social prosperity of Essex through joined up, accessible services

Through these aims we will realise our vision of 'Delivering and enabling Safer, Greener and Healthier travel for current and future users of the transport network in Essex'.

We will improve public satisfaction on all aspects of the highway network by maximising the commercial and strategic opportunities available through this partnership. Essex Highways is maintaining and adding to the existing highway network of which the residents of Essex can be proud.

# Building on success

Since 2012, the Essex Highways partnership has effectively and innovatively managed the county's biggest and most valuable asset, resulting in the public having a safe, accessible, serviceable and sustainable highway network. In 2020 ECC awarded Ringway Jacobs with a full five-year Essex Highways contract extension

In February 2020 ECC awarded Ringway Jacobs the maximum possible five-year Essex Highways contract extension which runs until 31 March 2027. The extension award followed the most intensively examined, independently benchmarked and scrutinised contract review process in the County Council's history.

The contract extension lets the partnership build on its successes to deliver an enhanced, innovative, industry-leading service, while making environmental and efficiency improvements for the people of Essex. It continues to pull-through technological, material and digital innovations and provide high levels of customer service.

Indeed, the partnership's approach to Asset Management has seen it achieve the BS ISO 55001 standard for Asset Management. This is no easy task given the scale of the challenge, the size of the network and the complexity of the infrastructure in Essex. This approach to Asset Management has helped Essex Highways consistently achieve Level 3 (the highest possible level) DfT Incentive funding over the past four years - in fact one of the strengths of the contract is that it has managed to secure a lot of external funding, such as the Housing Infrastructure Fund (HIF) announced in 2019. Funding was awarded to local authorities on a highly competitive basis, providing grant funding

for new infrastructure to unlock new homes in the areas of greatest housing demand. Over 50% of the money that was allocated for the first tranche was given to Essex (see Major Projects, page 26).

We are continually improving the highway network, reducing cost through innovation, delivering efficiencies, while helping ECC to achieve its Strategic Aims. Essex Highways directly helps to enable inclusive economic growth, but also helps to create **Safer, Greener, Healthier** places in which to grow up, to live and work.

We are creating a road environment that is safer, encouraging more people to cycle or walk, especially for shorter journeys. We are also bringing about sustainable transport solutions to ensure that Essex reduces carbon emissions and delivers long-term greener benefits. We want to provide long-term public health benefits so that our residents become and stay healthier.

There is much more to do and more challenges to face, including the aftermath of the financial and social consequences of the COVID-19 pandemic and global economic downturn - but the contract has achieved numerous and significant successes so far, endorsing the capability of this truly excellent partnership.



# Health and Safety

Ringway Jacobs' 'Think Safe, Home Safe' initiative has been the cornerstone of Essex Highways' culture since its introduction in 2015. It focuses our dedication to providing a safe working environment, ensuring our employees go home safely at the end of each day



Our health and safety objectives are refreshed each year to encourage staff to focus on appropriate themes every month, supported by online training modules and Tool Box Talks.

Positive Mental Health is a key aspect of the well-being of our people and is part of our ongoing cultural change journey to improve health and safety standards. 'Open Minds, Healthy Minds' is our vehicle to embed and implement awareness of positive mental health into our culture. This initiative has been hugely successful. Ringway Jacobs has 19 positive Mental Health champions and 11 Wellbeing champions. meeting once every quarter and every six weeks respectively.

In 2018 our organisation completed a best practice Five Star Occupational Health and Safety Audit conducted by the British Safety Council. This involved a review of our overall approach to safety management systems, as measured against a number of best practice benchmarks. In total, we underwent a detailed review of over sixty component elements. As a result,

Ringway Jacobs was awarded a five-star grading following the audit, with an outstanding score of 97.88%.

Ringway Jacobs was also awarded the renowned Sword of Honour from the British Safety Council (BSC) in 2019 and 2020, joining the small number of elite organisations worldwide that to achieve this. The Sword of Honour is awarded to companies that have demonstrated excellence in the management of health and safety risks at work.

Successful applicants have demonstrated that they are among the 'best of the best'.



Our approach is recognised beyond Essex. Ringway Jacobs was one of the first organisations worldwide to achieve the ISO 45001 standard for health and safety management best practice. The company was again awarded a ROSPA Gold Award in 2022, marking four consecutive years for this achievement, which recognises consistently excellent improvement in performance and an innovative approach to health and safety.

A key risk area for Ringway Jacobs is Roadworker Abuse. Here in Essex, our roadworkers have experienced being threatened with baseball bats, knives, had bottles of urine thrown at them and have been both physically and verbally assaulted just for doing their jobs.

In one incident TM operatives had to restrain someone until police arrived. Perhaps most chillingly, three years ago, Essex Highways operatives were threatened with a gun at Brook Street, Brentwood. Following that incident, Essex Highways held a couple of meetings with Essex police to discuss ideas to reduce roadworker abuse.

Consequently, Essex Police are supporting our road workers by patrolling hot spot areas and attending whenever necessary. Road-users will see new signs displayed at road closure sites, which will act as a reminder that police officers are in the area and will act in the event of abusive behaviour.

It may take some time to effect any change, but efforts will continue through 2023/24 to ensure that our operatives get more protection from members of the public who cause this problem. Paul Crick, Director of Highways and Transportation, ECC, is invited to present at this year's Stamp It Out summit at the House of Lords. He will provide Essex Highway's perspective on the issue, supported by some interesting incident data and hard hitting video of the type of abuse our workers regularly face

Our operatives are urged to report every incident of this type and submit their body-worn footage to the Police if they've captured an incident.

The Police will investigate thoroughly and all instances of prosecution will help reinforce the clear message that abuse of any kind against our staff will not be tolerated.



# Roads

Effective asset management of roads and footways leads to a safe, accessible, serviceable and sustainable highway network - vital for providing access to key services such as employment, healthcare, education, social services, sports and leisure

Having reviewed The Essex Highway Maintenance Strategy we have taken into consideration the UK Roads Leadership Group (UKRLG) "Well Managed Highway Infrastructure" Code of Practice and this has now been implemented.

Essex has maintained the highest possible status of "Level 3 of the Department for Transport Highway Maintenance Incentive Fund" since 2017/18 and our expectation is to retain this

additional funding (worth £3,409,000) during 2023/24 based on a recognised asset management approach.

Our asset-led maintenance strategy ensures that informed evidence-based decisions are made on the maintenance of all highway assets, giving the benefits of long-term planned works.

Investment in road and footpath maintenance is delivered at carefully planned intervals over the lifecycle of each

route. The Technical Working Group (TWG), a joint body within the partnership, reviews and updates current specifications, materials, technologies and treatment options across all service areas in support of delivering value for money.

The frequency of inspections is determined by the Essex Highway Maintenance Strategy with PR1 roads inspected monthly, PR2 roads inspected quarterly, and local roads inspected

annually. This equates to approximately 2,000 km of road length inspected in any given month. See the Efficiencies and Innovations section for how we are improving this service.

For 23/24 the strategic direction continues with the strategy of maintaining the county routes subject to funding while focussing capital funding on residential areas to target those areas in deteriorated condition in addition to addressing residents' concerns.

## Defects fixed during 2022/23

P1: 1505 P2: 1483 P3: 3224 P4: 1203

We expect to achieve similar numbers during 2023/24

**305**  
Road surfacing schemes completed in 2022/23

**180**  
Road surfacing schemes confirmed for 2023/24

Good coverage in 2022-23

Inlay Surfacing: 308,304 sq.m; 67 sites completed; 41.1km

Surface Dressing (TOTAL) – 657,000 sq.m; 57 sites; 111.6km

Entyre 453,674 sq.m; 28 sites

CE – 67,302 sq.m; 19 sites;

Lokchip – 136,023 sq.m; 10 sites

Micro surfacing (TOTAL) – 139,648 sq.m; 33 sites; 24.4km

Micro surfacing (machine lay) – 30037sq.m; 18.9km; 17 sites

Micro surfacing (hand lay) – 109,610sq.m; 5.6km; 16 sites sites

Micro Surfacing (Rejuvopatch: included in hand lay above)

# Footways

Essex Highway's strategy for footways is to improve the condition of these heavily used assets while maintaining the usability of the remaining network.

Slurry sealing is a cost-effective preventative measure for footways which seals the surface from water ingress and provides a new texture. Pre-patching and other work delivered throughout the year enables slurry sealing works to happen during the optimum time of April-September - adopting this activity in the later period of the year helps optimise delivery in the preceding year. Our aim is to always deliver all slurry work by the end of November. Works not completed by this date will be rolled into year 13. Any surplus budget for this activity will be re-allocated to deliver additional patching sites as preparation for the slurry treatment in year 13.

For Year 12, £1M is being made available specifically for cycleway improvements. These works will be delivered by the Minor Capital Works Team alongside the Capital Footway programme. The addition of funding for cycleway repairs is aligned to the Essex Highways Vision and Key Aims for enabling Safer, Greener and Healthier travel for current and future users of the transport network in Essex.

## Verge cutting

Verge cutting is an important aspect of keeping roads and footways safe for users. Roadside verges are cut to preserve sightlines and keep them clear of overhanging trees and shrubs, paying special attention to cutting down growth along our high-speed roads, which includes sections of the A13, a little of the A120, A130, A127, A1245 and A133.

Verge cutting season on "fast roads", usually begins in June where most of the work is completed overnight because the necessary traffic management, traffic lights and lane closures which would otherwise cause congestion.

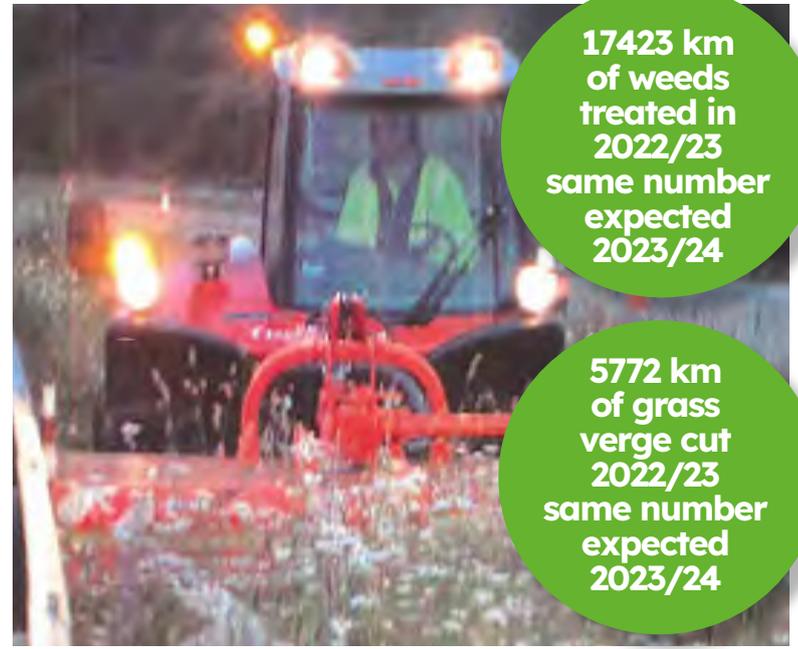
At the same time, the first application of weed control (of two annually) is done in Braintree, Colchester, Maldon and Uttlesford, with other areas following. Untreated weeds can have a detrimental impact to our network as they can grow quickly, ultimately causing damage to drains, footways and road surfaces.

As is our statutory obligation, our proactive approach to dealing with weeds and vegetation helps us to protect the asset and preserve its lifespan and represents better value for money for the residents of Essex in the long run because it helps to keep down maintenance costs.



**46**  
footway  
replacements  
completed  
during  
2022/23

**138**  
footway  
replacements  
confirmed  
for  
2023/24



**17423 km**  
of weeds  
treated in  
2022/23  
same number  
expected  
2023/24

**5772 km**  
of grass  
verge cut  
2022/23  
same number  
expected  
2023/24

Summer also sees the Parish verge-cutting programme, in some districts carried out by our partner companies, in others the City, Borough or District council make their own arrangements.

Essex Highways is working closely with partners to trial grass cutting regimes that will increase biodiversity as well as continuing to support the maintenance of 60km of Special Verges, so designated as they provide an important habitat for wildflowers and other native species in Essex.

# Quality

Quality is about ensuring that our service delivery is at the highest standard. Our aim is not only to maintain this but to continually improve it. Quality is measured externally through accreditation to various BS ISO standards



Quality is managed through site inspections / audits carried out by supervisors, managers, internal and external auditors. The audits assess the quality of works as well as Health, Safety and Environmental compliance. Quality is also assessed through 'Right First Time' audits carried out by a varied selection of supervisors, engineers and highway inspectors.

Essex Highways is certified to the following standards:

- BS ISO 9001 – Quality Management Systems
- BS ISO 14001 – Environmental Management
- BS ISO 44001 – Collaborative Working
- BS ISO 45001 – Occupational Health & Safety
- BS ISO 55001 – Asset Management

Essex Highways was one of the first organisations in the country to be accredited to BS ISO 55001 Asset Management of footways and carriageways in March 2017. One of the main benefits of this accreditation is that it has helped to secure additional funding from the DfT through the Highway Maintenance Incentive Fund which amounted to £3.409m in 2022-23.

We have retained our certification to BS ISO 55001 for three years and stated that our performance has remained consistently high. This status re-assures other external bodies, including the Department for Transport when assessing us for the Incentive Fund and other initiatives, helping to secure additional funding for ECC's highways service.

The certification is currently for carriageways and footways, however, our ambition is that we can expand this to cover all highway assets in the future. Throughout 2023/24 the DfT will work with local councils to develop Incentive Fund future questions going forward. Question(s) on Sustainability are part of the scoring process submission (for 2024/25 funding). Essex Highways has set up Action Groups to develop our

approach to reducing our carbon footprint and improve the biodiversity of our works. The Asset Management Team is working closely with the other Ringway Jacobs contracts to ensure a coherent and favourable position for the anticipated submission at the end of 2023/24.

Accreditation to these standards recognises that we have industry leading processes and supporting culture to deliver our services to the highest levels. However, the real measure of quality lies in continuous improvement and innovation and this is monitored and reflected in Essex through the contract KPIs. Key objectives this year include:

- Management of Essex Highways elements of the RJMS (Ringway Jacobs Management System).
- Maintain accreditation to ISO 9001, 14001, 44001, 45001 and 55001 standards.
- Maintain the accreditation to ISO 55001 – Asset Management the scope of which currently includes carriageways and footways.
- To support the organisation's long-term objective to work towards extending the scope of ISO55001 to include the additional disciplines of ITS, Street Lighting and Structures.
- Manage the audit programme against BSI standards and internal processes.
- Maintain the EH/ECC joint audit programme and ensure consistent reporting and actioning of outcomes through Business Improvement Actions and JIP.
- Manage the Business Improvement Actions (BIAs) process to ensure that they are closed in a timely manner and the corrective and preventative actions are clearly and accurately identified.
- Joint development of the KPI Framework and reaching timely agreement.
- Collection of Performance Indicator results from the various sources and collating into the summary report.
- Production of monthly KPI Dashboard report.
- Production of monthly EHB Dashboard report.
- Attendance at the monthly Performance Management Meeting (PMM).
- Attendance at the Contract Review Meeting (CRM).
- Attendance at the Joint Audit Tracker Meeting (JAT).
- Maintain the Business Continuity Plan and liaison with ECC to ensure contractual compliance.
- Production of the monthly SHE report.
- Coordinate, record, and report on the activities relating to Social Value.
- Coordinate the review of Contract processes and procedures.
- Maintain the Social Value portal.

# Efficiencies and Innovation

Doing something new or in a different way to improve the business and provide an excellent customer experience...



Efficiencies and innovations from all areas of the contract are managed through this team. In agreement with ECC Commissioning, all efficiencies are required to deliver cashable savings. The team is responsible for:

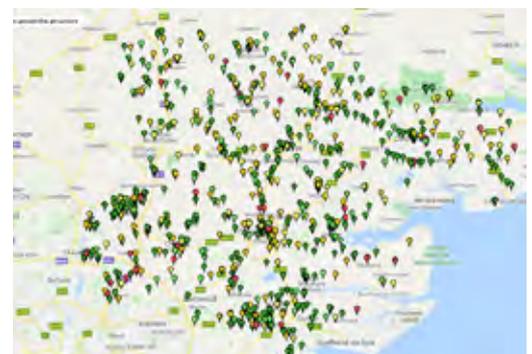
- Identification, development and reporting of innovations and efficiencies within Essex Highways.
- Supporting the Efficiencies Working Group.

Our focus here is on delivering cashable efficiencies where budget reductions can be made. These can either be one-off cost reductions (such as a change of material or process for an individual project) or the renegotiation of supply chain contracts. System developments are key drivers for service improvements. Our focus on the electronic handling of information has helped the service to become data/intelligence led. Essex Highways is continually introducing new innovations and new technology on the network to improve efficiency, drive quality and exploit sustainable energy.

We have introduced the use of 'Warm Asphalt', a more sustainable production process through reducing the operating temperature. In doing so, our shareholder Eurovia has cut production carbon emissions by over 25%, helping us make road surfacing Safer, Greener, Healthier.

RoadAI, provided by Vaisala, is an alternative road condition survey using artificial intelligence software that teaches the system how to identify and treat different types of condition related defects. We have also implemented the use of BridgeStation, an advanced bridge management system to assist in the effective management of bridges and associated data.

In 2023-24 we will continue to realise efficiencies through a number of ways to improve processes, remove duplicity of effort and methodology that isn't working have been identified. Having been assessed for viability and in terms of how much money can be saved, they are being implemented across the service. A good example of this has been the Route Optimisation work we have undertaken to help make our Winter Service more efficient.



# Environment, Decarbonisation and Sustainability Management

Essex Highways, under the Ringway Jacobs integrated management system, is accredited to ISO 14001 - Environmental Management. As a requirement of this standard, the company's commitment to the environment is detailed in the Environmental Policy

All staff working for and on behalf of Essex Highways are expected to take personal responsibility for the environmental impact of their actions.

Formal responsibility within the service is maintained by the dedicated Health, Safety, Environment, Quality (HSEQ) team supported by the Business Improvement & Planning (BI&P) team. This involves the carrying out of internal audits and the management of any corrective actions.

Environmental Management is included within the Service Plans and during the development of these, the BI&P team ensures that due consideration is given to this aspect.

Waste disposal is a significant cost, both for the contract and the environment. Waste management is addressed by each of the Service Area owners within their Service Plans, working with Ringway Jacobs' Sustainability Business Partner to further develop measuring and reporting the generation of greenhouse gas emissions.

This is being extended from the current Scope 1 and 2 to include Scope 3 emissions. Ringway Jacobs has set a target for a CO2 reduction of 5% per year to 2025 but is imperative that current emissions are baselined to enable measurement of future reductions.

However, there are also other factors that affect climate change and air quality needs to be measured and monitored for particles and ozone. Biodiversity is a measure of variation at the

genetic, species, and ecosystem. It is essential for human existence and our environment to deliver key services including clean air and water.

To understand where Essex Highways' activities have an impact on Biodiversity and the impact on Carbon, a work stream review has been undertaken.

Work has taken place with Ringway Jacob's Sustainability Business Partner to further develop the measuring and reporting of Biodiversity which will lead to guidance on the impact of future works.

This has identified activities which may have an impact and whether that impact can be measured.

Measurement is the first step and undertaking this has a cost impact, i.e., a resource will be required to provide, record, and collate data from our direct works and from the supply chain. This will help us to deliver continued process digitisation improvements and report on the benefits delivered from the allocated / ringfenced innovation budget.

Social Value encompasses the broad concept of adding value by incorporating social, environmental, and economic costs and benefits of an organisation's activities within the communities it operates. This means that as well as considering the direct effects of

interventions, the wider effects on individuals, communities and the economy should also be considered.

The Social Value Act 2012 requires organisations to consider how they contribute to improving the quality of life of people and the environment around their business. The team is responsible for collating the data and providing the monthly Social Value report (See more, page 14).



The Covid-19 pandemic forced a work from home culture and the use of Microsoft Teams for business meetings.

With the easing of restrictions, the move to a hybrid working arrangement, for staff for which this is applicable, has significantly reduced the amount of travelling for staff across the network, thus reducing CO2 emissions.

The use of Microsoft Teams for meetings has improved the flexibility and efficiency of the business as we are able to hold visual meetings and share documents without the need to travel or move offices. However, there are times when face to face meetings are advantageous and the benefits of these should not be overlooked.

While no voluntary community works have been carried out since before the Covid-19 pandemic, the team is aiming to carry out at least one day of voluntary community work during 2023/24.



In 2022, we were the first Highways service in the UK to introduce electric powered hoists on our Mobile Elevated Work Platforms (MEWPs)



# Social Value

The Public Services (Social Value) Act 2012 requires that public bodies procuring services ensure that contracts achieve social, economical and environmental benefits beyond just the primary goals. Ringway Jacobs is fully focussed upon the delivery of positive social and environmental initiatives

Social Value is about long-term, sustainable improvement for society that can be generated by promoting positive social, economic, and environmental impacts.

Ringway Jacobs is committed to working with its employees, supply chain, customers, shareholders and wider networks to drive positive change and long-term benefit to society. The company aims to ensure that it leaves a positive legacy in the communities where it works.



## What is social impact and social value?

The terms 'social value' and 'social impact' are widely used but what do we mean by them?

**Social impact** – This means the impact (both positive and negative) that an organisation (and supply chain) has on people and communities because of an action or inaction relating to an activity, project, programme, or policy.

**Social value** – Financial/non-financial value to society that an organisation's social impact makes. It is the difference organisations make which can benefit society.

## Social Value Policy

Ringway Jacobs is committed to maintaining and enhancing its capability to work collaboratively with clients, customers and its

supply chain to create social value that would not normally be achieved by working independently. This policy is supported by the company's sustainability strategy and policy. It covers the following areas:

### People

- Engaging with our people, trusting them to work openly and ethically at every level
- Offering our people long term development and training programmes ensuring a two-way commitment
- Use the expertise of our people to provide effective, efficient, innovative and sustainable solutions to deliver excellence to our clients

### Local Business and Economy

- Promote respect, honesty and transparency throughout our business. Build a positive reputation within the industry
- Work in partnership with all to share our knowledge and best practice to achieve common goals.
- Strive to deliver technical, professional, operational and safety excellence in all we do.

### Community Engagement

- Carry out volunteering activities that deliver benefits to local communities
- Work with local charities on key themes to deliver additional benefits to the communities in which we work
- Work with education and training providers, industry bodies and charities to offer curriculum support and work experience opportunities.

### Environment

- Strive to be a resilient business, while having a positive impact on our People, Planet and Economy
- Manage and reduce the impact of our activities on the planet

- Manage our business economically in a sustainable manner.

### Governance, Measuring and Reporting

- Maintain clear accountability for delivering this policy
- Monitor and report our social value impact by using recognised independent tools
- Continuously improve our standards, efficiency, and effectiveness

### Our Key Social Value Objectives

- Create locally focussed sustainable solutions resulting in economic, social, and environmental benefits.

### Help communities recover post COVID-19

- Create employment, re-training and other return to work initiatives which will also include the use of government schemes such as Kickstart.
- Grow and diversify our supply chain by providing the same opportunities to Small to Medium Enterprises (SMEs) and Voluntary Community and Social Enterprises (VCSEs) as larger companies, to tender for, and win contracts.
- Support the physical and mental health of our people and local communities who have been affected by COVID-19.
- Continue to embrace sustainable travel solutions and ways of working.

### Create new jobs and skills to tackle economic inequality

This will focus on partnerships, skills, and development opportunities which will lead to the opening of career routes into highways and construction:

- Inspire people to continually develop their skills and embrace opportunities within the highways and construction industry.

- Create training and employment opportunities particularly for those who face barriers to employment and/or who reside in deprived areas.
- Encourage people to gain the skills and qualifications required for the current and future needs of the industry and address skills gaps.
- Encourage people within our organisation to continuously develop their skills and gain recognised qualifications.

### Fight Climate Change

We have a responsibility and an opportunity to leave a positive impact on people and on the environment through everything we do:

- Reduce our carbon footprint to net zero and adapt to climate change.
- Influence staff, suppliers, customers and communities to support environmental protection and improvement
- Promote and use materials and products from sustainable sources.
- Create cleaner and greener places in which to live and work.

Our Sustainability Plan will play an active role in tackling climate change and ensuring we are an effective steward of the environment in the communities where we work.

### Improving Health and Wellbeing

We care about the wellbeing, happiness, and development of

our people:

- We provide activities to support the improvement of health and wellbeing, including physical and mental health for our workforce.
- We support our partners and clients to improve the health and wellbeing of their workforce.
- We look for opportunities to raise awareness and support the health and wellbeing of our staff, suppliers and those in the communities where we work.

### Support Community Involvement and Development

To improve our environment and well-being we must understand the communities where we work. Through our local level action plans, we will:

- Align delivery plans with local needs and partner with local organisations to deliver on our priorities.
- Encourage our people to volunteer in their local communities and commit to two days volunteering.
- Raise money for local causes and support local charities.
- Provide engagement opportunities for the local community e.g. school site visits

### Support sustainable long-term economic development for clients and communities

We will work with our partners to create sustainable communities, maximising community and business growth by:

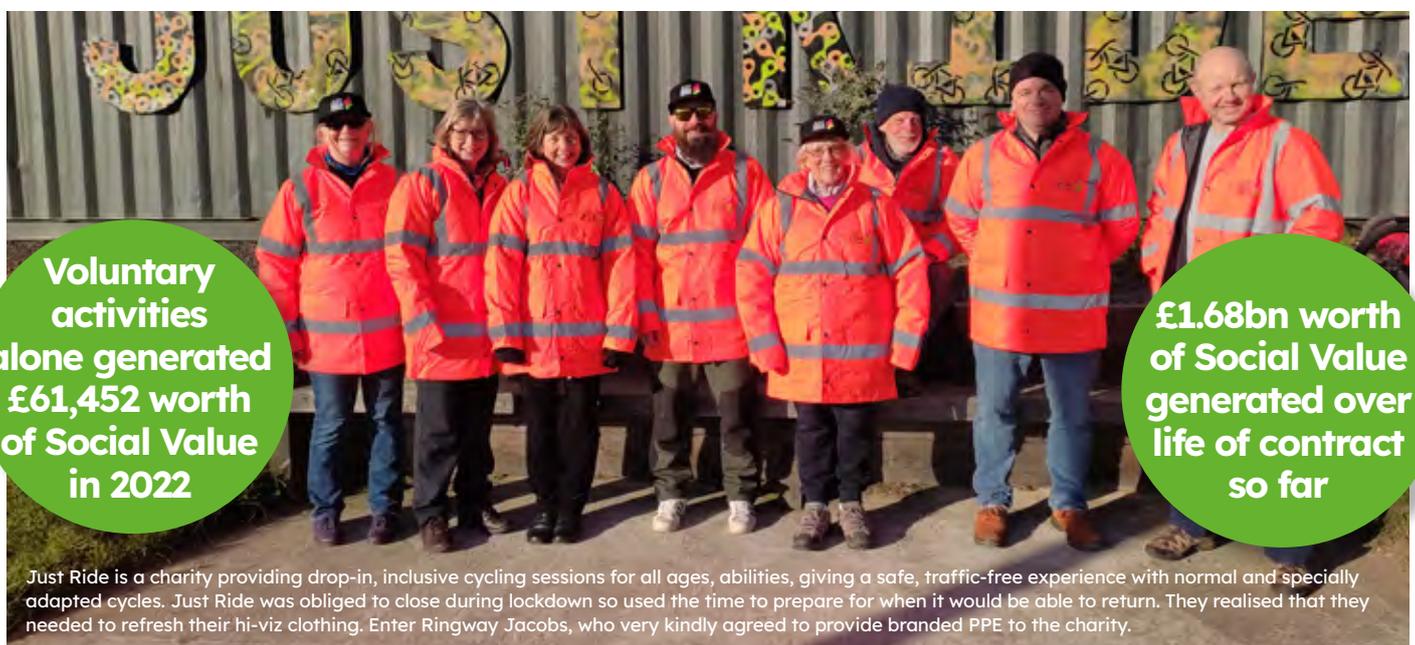
- Understanding roads and streets – maximising business growth and active travel through fit-for purpose infrastructure.
- Minimising waste as much as possible by refusing to have unnecessary and unsustainable products, re-thinking designs with a focus on reducing their environmental impact.
- Maximising Modern Methods of Construction and their impact on areas of deprivation.
- Strategic Asset Planning to maximise the social Return on Investment for central and local government partners.

### How is Social Value be managed?

The strategy for driving social value in Ringway Jacobs is led by the Social Value Management Board and managed by the Performance and Quality Manager.

The approach is based on collaboration at all levels to drive the biggest impact within the business and communities where we work. We work in partnership with:

- HR Business Partners
- Sustainability Business Partners
- Health and Safety Business Partners
- Working Well Champions
- Mental Health Champions
- Heads of Service
- Communication Team
- Clients and customers
- Supply Chain Partners



**Voluntary activities alone generated £61,452 worth of Social Value in 2022**

**£1.68bn worth of Social Value generated over life of contract so far**

Just Ride is a charity providing drop-in, inclusive cycling sessions for all ages, abilities, giving a safe, traffic-free experience with normal and specially adapted cycles. Just Ride was obliged to close during lockdown so used the time to prepare for when it would be able to return. They realised that they needed to refresh their hi-viz clothing. Enter Ringway Jacobs, who very kindly agreed to provide branded PPE to the charity.

# Asset, Records Management and Inspections



**The Asset, Records Management and Inspections Service Area of Essex Highways comprises five teams:**

## **Asset team**

The Asset Team implements best practice to ensure delivery and compliance with our integrated asset management-led policy and strategy. This is done to maximise the benefit of investment across all ECC highway assets.

The team keeps asset data systems up to date and fit for purpose, ensuring accurate data is readily available for internal and external customers and stakeholders. The team also provides prioritised asset-derived information to drive Essex Highway's long-term forward programme. Over the next two year period the strategic approach taken by ECC remains asset-led while considering customer requirements.

Both our Asset Management strategy and policy inform an increased understanding of asset condition, helping define our long term, programme for maintenance and renewal, while helping us meet the Safer, Greener, Healthier and Everyone's Essex agendas. The team's focus for the coming years is:

- Sustaining DfT Band 3 status.
- Consolidate the team into a single asset team, providing training as necessary.
- Work with Network Rail to deliver the outcomes of the level crossing closure decision as appropriate.





- Continue the England Coast Path project.
- Complete 23/24 Strategic Asset Management Plan.
- Bids for external funding to supplement ECC budgets.
- Continue to embed the highway enforcement team, focus on training and development, and investigate potential for income generation through penalty notices.
- Continue to embed new ways of working into Public Rights of Way (PRoW) team including the new PRoW hierarchy (pending approval of the PRoW Maintenance Strategy).
- Continue to deliver land searches within suitable timeframes, ensuring that all districts are invoiced monthly for searches undertaken.
- Target long standing PRoW enforcement cases.
- Continued investigation into Carbon impacts and measurement.
- Roll out Phase 3 of remaining Maintenance Strategies (, Skid resistance and VRS).
- Develop a five-year programme detailing risks and associated mitigations / planned works and timescales.
- Assist and offer advice with the development of the “Place & Movement” Strategy

## Definitive Map & Records Team and Land Searches

We contribute to economic growth in Essex by providing a prompt and efficient land charge enquiry service to District Councils. The team delivers statutory functions associated with maintaining the Definitive Map of PRoW, and provides a service to carry out Public path Orders.

We also liaise with planners to minimise impact/ maximise potential for the PRoW network from planning applications. We provide responses to Highway Record enquiries and promote the

further development of web-based IT in order to facilitate self-service by the public.

## Public Rights of Way (PRoW)

The PRoW team delivers inspections of the PRoW network, as well as programming and managing works on the ground. The number of PRoW enquiries continues to be high and following the Transformation Programme, there has been a reduction in the number of Officers.

The Transformation Programme identified several process changes that, coupled with a new PRoW Inspections and Maintenance Strategy, will be embedded into the team over the coming year. Our PRoW Officers are now additionally responsible for volunteer management and Capital scheme works. They will continue to deliver these elements with an emphasis on encouraging increased volunteer involvement.

## Enforcement

Two Enforcement teams sit within this Service Area: The PRoW and Highway Enforcement teams. The teams share a primary focus, ensuring that both the PRoW and highway networks are free from encroachment, flooding and obstruction. Residents are encouraged to look after the areas outside their homes or property.

The Highways Enforcement team was expanded as part of the Transformation Programme and is now complete. Much of this year will be spent further establishing the team, with focus falling on training needs, working practices, target areas and getting new team members to the point where they are able to work independently. This includes elements of training for other areas of the business - mainly Inspections - to help restore a more connected approach for first line Enforcement and investigating potential income generation through penalty notices.



inspection regime continues to support our asset led decisions. This approach delivers revenue maintenance asset condition data that also supports the commissioned capital maintenance programmes, enhanced by technology such as the rollout of RoadAI (image top left).

Highway safety inspections provide a record of defects that meet the investigatory levels set out in the Essex Highways Maintenance Strategy, including those in connection with carriageways, footways, road signs and street furniture. Inspections also record condition assessments of key highway assets, such as footways, to inform the capital programme.

Over the next three years, the inspection regime will continue to be developed to support our asset led decisions. The asset-led approach to inspections delivers revenue maintenance asset condition data that also supports the commissioned capital maintenance programmes.

Our data capture capability was enhanced during 2022/23 with the rollout of RoadAI and Route Optimisation. RoadAI offers capability to help identify potholes within captured video footage. RoadAI has been introduced on all driven routes on the network. It enables a single inspector to inspect and record a route via a RoadAI device mounted in the windscreen of their vehicle. Drivers no longer need to stop at each defect as identified issues on the network are recorded.

Optimisation involves using technology and the data held within Confirm. Having plotted our inspection routes and frequencies onto an electronic map, we have a visual guide to all the inspections on the network. This helps us by highlighting any anomalies enabling us to amend them with ease aiding the optimisation of the network.

The use of RoadAI and the implementation of route optimisation is enabling us to monitor the workload of the inspectors more efficiently. Consolidating this with performance management and target setting enables and supports the more efficient delivery of the service.

The PRow Enforcement team deals with everyday issues as they arise on the PRow network and several long-standing enforcement cases were progressed throughout year 11.

In Year 12, the team will identify a small number (usually 3-4 depending on complexity and other ongoing cases) of cases to proactively address. Focus will also fall on ensuring the improved crossfield reinstatement compliance by farmers and we will also work with The Essex Area Ramblers on a number of cases which have been identified as high priorities by their membership.

## Inspections

This team has been established for several years, carrying out routine Highway Safety Inspections and has a reputation for delivering consistent, quality services.

All Inspections of the highway are undertaken on a routine basis with the frequency of inspection falling in line with the hierarchy of the network and the use of the asset. All defects logged on a routine or adhoc inspection are risk assessed and prioritised accordingly and can form the basis for any court defence.

Due to their specialist knowledge and experience, team members are regularly called upon to provide evidence at Court in defence of third-party claims against ECC and Ringway Jacobs. Our



Elsewhere, the remote footway network has been mapped in the asset management system, CONFIRM, which allows better quantifying of the length of network to be inspected. We can review the geographical areas covered by each Inspector which helps us to redistribute work across the team to better balance workloads and improve efficiency. The data capture of condition associated with this network also helps to improve the focus of the capital footway programme.

The team also supports data capture exercises such as those that inform bids submitted by other sections within Essex Highways on behalf of ECC to the Department for Transport for dry weather damage.

The team works with other elements of the Service including Maintenance & Operations and Network & Safety to identify if there are further elements of data capture that can be undertaken on inspections. This will help better informed decisions about works programmes to be made.



# Bridges, Subways and other Structures

Ensuring the maximum life of all structural assets through targeted maintenance, to provide safe and accessible passage along the highways

There are 1624 structures throughout Essex which are varied in age and complex by nature. They comprise bridges, subways, retaining walls, culverts and headwalls. The condition of these assets requires management through regular inspections and maintenance. This inevitably leads to the design of improvements or replacing existing structures.

The importance of improving the Asset Led approach for Structures is recognised and we are committed to improving our asset data on structures. In addition, the new maintenance policy for structures is being embedded. Our ongoing Structures Improvement plan has three areas of improvement which are:

- Principal inspections (PIs) - Essex Highways is looking to implement a risk-based PI programme
- Structural reviews - following a Principal Inspection, a Structural review will be undertaken.
- Management of sub-standard assets - completion of a standalone review (not dependent on other works taking place) of all substandard assets

Work on PIs is a clear example where efficiency, innovation and service resilience has all been delivered in one project. Where access equipment was previously required the use of drones and the process for all PIs has been stripped back to simply collect the data and input it directly into Bridgestation. The system stores all relevant data and assumptions and can be easily kept up to date with any changes to the asset. This then

automatically appraises the asset on priority of reassessment according to the standards. This approach provides Essex Highways with up to date conditions of its assets and better understanding of the impact they will have on the highway network.

We will continue monitoring throughout the year to ensure that all interested parties are clear about potential risk, aware of the current status of the structures asset and agree plans for future works. Schemes contained within the capital programme prioritise the structures with the highest risk.

During 2022-23, nine major bridge repairs were carried out as part of the year's improvement schemes that were either investigated, prepared or delivered, including the high profile Oasis Bridge in Chelmsford. 30 schemes are planned to be delivered, with a further 71 in various stages of assessment and design during 2023-24.

On occasions, temporary weight limits are imposed on structures while the design of a repair or replacement is completed and / or funding made available. In extreme cases, the passage of traffic over the structure might be restricted or prevented in the interests of safety.

The management of abnormal loads and weight restrictions are also a key element when it comes to managing the county's structures. Each individual bridge on the route is checked by a dedicated Abnormal Loads Office to ensure that they are capable of supporting the proposed loads.



Oasis Bridge, Chelmsford

**30**  
schemes  
developed  
from feasibility  
to design -  
18 constructed  
2022-23

**26**  
improvement  
schemes  
planned for  
delivery  
2023-24

# Commercial

The commercial team plays a key role in Essex Highways, supporting all areas of the Service to ensure compliance with the requirements of both the ECC contract and the commercial governance of Ringway Jacobs

The Commercial team does not own any Task Orders but has a responsibility to assist Task Order owners to ensure that budgets and outputs are delivered in a contractually compliant and efficient manner.

We are responsible for the delivery of all obligations set under the contract and also provide greater visibility, control, and auditability of any key contractual notifications, communications and/or decisions. These are recorded within the CEMAR contract administration system. This is a web-based change management tool that helps the administration and management of existing contract mechanisms. It also serves as a data log that provides valuable analytics as the Contract evolves. This gives us control and visibility. It is the sole source of information directly relating to the management of all Task Orders.

CEMAR makes it possible for all relevant users to access live, accurate and up to date information. The responsibility for the maintenance of CEMAR remains with the Business Improvement team, but the Commercial team ensures that Contract communications are processed through the system in a timely manner.

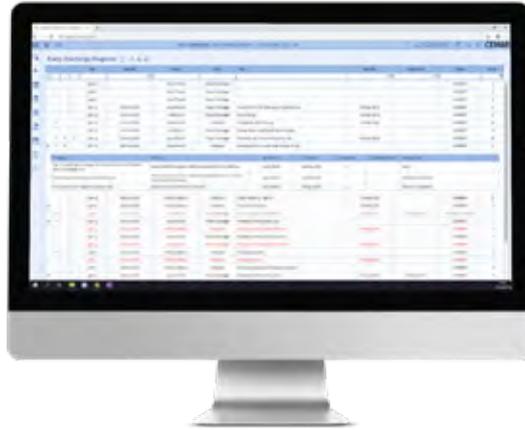
## Continuous Improvement

Works delivered through Supply Chain Partners (SCPs) are, where appropriate, procured through a competitive target costing process. This requires that target cost submissions are assessed to ensure their adherence to the pre-contract scope and timeline. Any variations are challenged prior to the award of the work to the most competitive submission.

The works are then managed in accordance with embedded procedures including the revaluation of final accounts. This ensures that these reflect the actual works delivered and are in line with the original target cost quotation. The processes associated with this are reviewed and revised if necessary to mitigate the risk of any noncompliance and reflect any audit/sampling or best practice/lessons learned throughout the year.

## Innovations and Efficiencies

The Commercial team is the main conduit between the wider Service and the Efficiency Manager.



Identifying and maximising cashable benefits is critical to both the Provider and Authority to ensure that targets are met or exceeded. Recently the Commercial team has worked on:

- Promoting long term agreements with the supply chain in return for reduced fees, rates or cost inflation certainty. This provides the supply chain with the ability to plan, and programme works and resources in the most efficient manner.
- Procuring materials for free issue to the supply chain, removing an element of overhead and profit mark-up, assisting the Operations team to make informed decisions over whether to subcontract or self-deliver works (such as, for example, traffic management, gully cleansing and the provision of operated plant).

## Environment, Decarbonisation and Sustainability Management

The Commercial team works with delivery teams to ensure compliance with the accredited standard ISO14001 – Environmental Management. The main driver is the monitoring and reduction of waste. Waste is not only a direct cost but also a waste of natural resources.

Supply Chain Partners are encouraged to promote ways to minimise waste to reduce the cost of waste disposal. The Commercial team regularly liaises with the wider Service to identify and capture Social Value. This is then recorded in the Social Profit Calculator tool by the Business Improvement and Performance team. Ringway Jacobs is also assisting ECC with the transition to Theme Outcome Measures (TOMs). Current initiatives include:

- Engaging with Supply Chain Partners to share best practice and see how far along they are re: Environment, Decarbonisation and Sustainability Management. This involves using the Ringway Jacobs Sustainability Business Partner
- Maximising the adoption of electric plant / vehicle where economically viable
- Seeking to incorporate more sustainable ways of working and specifying the use of eco friendly innovations within tender requirements (i.e. the use of solar powered welfare units, grey water harvesting etc.)

# Communications

The Essex Highways Communications team provides a mixture of public relations, marketing and customer service support, giving factual, useful service delivery information and knowledge



The Essex Highways' Communications team manages the 'one-to-many' information-sharing channels between Essex Highways service delivery teams, various other internal groups and the public and highways users of Essex.

Working to the direction of the Cabinet Member for Highways Maintenance and Sustainable Transport, The Director of Highways and Transportation and the service's Operations Director, we provide a public information service using a variety of channels and formats. This includes working alongside ECC Customer Services; Your Right to Know Team; Member Services and Corporate & Executive Complaints teams, using our knowledge and the expertise of the service to provide information to the public.

We operate entirely in line with ECC policies, protocols and related ECC Service areas. Our work adds value in three key 'non-engineering' areas:

- Reputation & Brand Management.
- Provision of public, politician, officer and staff highways service information, awareness, and education.
- Helping with inbound enquiry management.
- We also help to deliver wider ECC efficiencies, mainly by encouraging the public to self-serve

with highways enquiries and reports through curation, innovations and improvements to the Essex Highways website. This is managed by Ringway Jacobs entirely for ECC, leading to less pressure on the inbound ECC Contact Centre and service operational teams. We also help ECC to meet its statutory responsibilities by answering Highways service delivery related FOIs/EIRs and other enquiries within statutory deadlines.

For 2023/24 Communications service work will focus on promoting six key themes where possible. These are:

- Promoting the role Essex Highways plays in delivering ECC's ambition of Safer, Greener, Healthier travel and transport across the county. Putting into context and using communications channels to explain how the maintenance and repair work the service delivers allows residents to easily choose sustainable modes of travel, such as making walking, wheeling, and cycling safer.
- Reputation management. The work of the communications team is heavily focused on clearly explaining the 'what', 'why', 'when' and 'how' of the works and responsibility of Essex Highways, with the aim of protecting the reputation of the organisation, ECC, Ringways Jacobs and other partners. A new approach

to brand placement will also cement ECC's accountability in the delivery of Essex Highways' work.

- Being customer focused - ensuring we 'think like the customer'. Looking at how we can make sure that the public can understand our communications, language and terminology to make sure our information is as accessible as possible. We will identify how we communicate and engage differently with different audiences (general Essex public vs Members vs campaign and protest groups vs staff, for instance). We will also look at where collaboration between different customer and enquiry points can be enhanced to ensure support and join up is encouraged and responses are from the same unified voice.
- Putting a clear user journey in place. Making sure that information about Essex Highways, our Report It tool and other services and information we provide is as easy and simple to understand as possible.
- Take a proactive campaign approach to communications. Consider the bigger picture and over-arching objectives of Essex Highways, alongside ECC's ambitions set out in Everyone's Essex to determine what the communication's objectives each season are. This includes embedding clear calls to action and key messages across all relevant communications. This will help us to set out a programme of communications and engagement for the Cabinet Member.
- Promoting Wellbeing (of staff and customers), to champion and celebrate the achievement of the Essex Highways workforce, keep the workforce and public safer and healthier. This will include roadworker abuse issues and, where relevant, SERP 'Vision Zero' messages.

The team's day-to-day workload is to:

- Improve awareness of the positive works/ investment we are undertaking on behalf of the County Council, through media response and positive media outreach; use of social media channels and other online methods, and through publications such as Highways Highlights and news that provides particularly County Members with the progress updates they seek.
- Act as the brand guardians of the Essex Highways visual and written identity, as expressed in the agreed 'Essex Highways Style Guide'. We will ensure that branding is used to provide clear accountability and is used to portray the service and ECC in a professional manner.

In 2023/24 we will follow ECC's lead and direction on the next iteration of service branding as it is developed, defined then rolled out.

- We will provide as much factual, useful highways-related information as is possible within our available resources, preferably using digital means to the public, specifically including County Members. This will be underpinned by a rolling programme of work to assess the information available on the Essex Highways website and make this content

- and all other content produced - as clear, easy, and simple to understand as possible.

- We seek to improve the knowledge of service operation, constraints and successes. Delivering this will help to minimise inbound customer enquiries elsewhere in ECC, as part of broader cost-saving and customer experience priorities. This will also tackle the challenge of communicating how the service delivers its priorities against a tough economic backdrop.
- Maintain and improve information to and with the staff of Essex Highways. We do this through a variety of managed or facilitated staff communications channels. The focus this year will be improving transparency and raising the profile of the SLT and their teams through a variety of engagement opportunities; identifying opportunities to champion and celebrate the work of teams within the organisation and promote tools available to help with mental health and well-being.



# Development Management

Managing the outcome of planning applications and associated roads for adoption by the authority



Economic growth and the need for more housing stock in Essex brings pressures on the local road network and growth in the highway estate road system. Essex Highways' Development Management team is responsible for delivering the design and construction of all works on the public highway and areas for adoption on behalf of ECC. We have a key part to play in supporting the economic and social prosperity with our work in facilitating development.

We work with colleagues in Strategic Development and the planning authority to consider planning applications. We ensure that any new assets are constructed to a standard suitable for adoption and maintainable by ECC. Each adoption means an increase in assets that we are responsible for that is not mirrored by increased budgets. This results in increased risk to the network serviceability and requires careful management.

We have our own regional forum where all our fees are regularly benchmarked. Essex continues to be the County at the cutting edge of working with developers to introduce their developments in a manner that is mindful of the additional pressure these new assets create. Across all of Design Services, we hold a cross contract Design Forum

where we promote national bench marking and share expertise across the contracts.

We are presently involved in approximately 1600 developments across the county which vary in size, from minor developments to the infrastructure for major sites of 3000+ homes, such as Beaulieu in north Chelmsford.

The expectation for the coming year is for sustained demand on our services and increasing workload. To respond to the challenge, we are improving our existing processes and we are working towards developing online interactive software which is targeted at developers providing information and application forms to speed up the process.

We have a key part to play in supporting the economic and social prosperity with its work in facilitating development. Both the Development Management Team and the Design Teams introduce schemes which promote safe walking, cycling and passenger transport which contributes towards ensure everything we do supports the drive towards a greener Essex. Our work on introducing disabled parking bays and pram crossings provides joined up, accessible services.

# Local Highway Panels

£7.2m additional funding over the next two years - These numbers will increase as the schemes are identified by the LHPs in line with the increased budget

Small scale schemes are identified by the 12 district LHPs and delivered by Essex Highways. Requests for improvements are received from a cross section of society, including local residents, Parish Councils, District/City/Borough Councillors and County Councillors and these are submitted to the LHPs for consideration.

The panels are encouraged to present their concerns on which Essex Highways officers and engineers offer support and advice, providing options and solutions for agreement and approval by the Cabinet Member for Highways Maintenance

and Sustainable Transport. Our approach on the LHPs has recently seen a shift in emphasis whereby we are now encouraging maintenance works rather than delivering minor traffic management schemes, with a view to deliver better outcomes.

We intend to further evolve LHPs this year by expanding them to allow for Parish/Crowdfunding initiatives. The LHPs will also help us train members to ensure that we engage with our transport network users and provide them with the right information to help shape Essex priorities.



# Major Projects

The collaborative ECC / Ringway Jacobs Major Projects service finds itself at the front end of responding to the Government’s investment strategy in housing, jobs, sustainable travel, carbon reduction and supporting transportation infrastructure

Essex Highways continues to develop expertise to enable more effective delivery of improvement schemes, getting it right first time and making long term, sustainable improvements.

Major improvements to transport infrastructure are required to keep the Essex economy growing to its full potential. All of these are planned, developed designed and managed through construction to completion and opening.

The collaborative ECC / Ringway Jacobs Major Projects service is at the front end of responding to the Government’s investment strategy in housing, jobs, sustainable travel and supporting transportation infrastructure.

This growing and changing service delivery has been made possible through the development of a strong local team and extensive reach back to our shareholder, Jacobs, which has numerous offices across the UK

and other parts of the world, including Poland. Regular/ monthly governance mechanisms to plan and manage the extensive and dynamic delivery programmes have been put in place.

A high level of collaboration and co-operation between the Major Projects team and our Essex colleagues, at all commissioning and delivery levels, is the key to our continued success.

Our teams are able to rapidly compile credible funding bids for numerous funding sources including the recent Active Travel Fund (ATF), Housing Infrastructure Fund (HIF), DEFRA, Major Road Network/Large Local Major (MRN / LLM), Pinch Point Fund etc.

We have developed a very competent and responsive bid team who have been very successful in preparing/ submitting/winning funding for Essex. To date we have secured

in the order of £460m bid funding towards Essex infrastructure.

The large Housing Infrastructure Fund (HIF) schemes that were awarded in Yr8 originally needed to be delivered in a short timeframe but following discussion with HIF, programme extensions to March 2025 were agreed.

Efforts continue with the parallel progression of the preparation and design of the schemes, budget and funding profiles, stakeholder engagement, land ownership and negotiations, utilities and environmental constraints and issues.

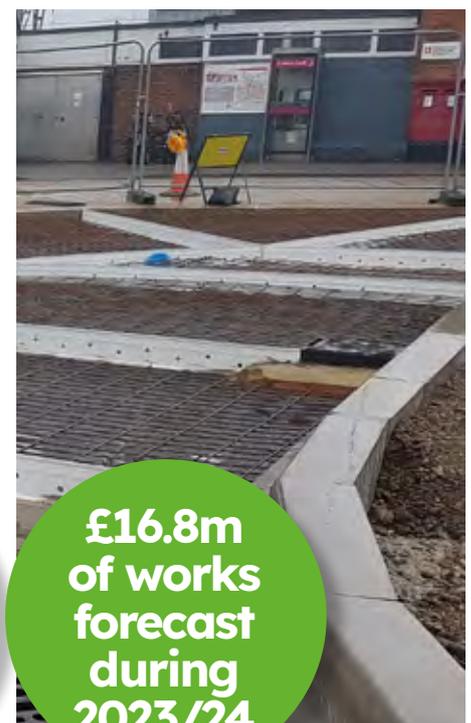
- Last year, the following major schemes were progressed/ delivered: M11 J7a: The scheme was complete/opened to the public in Summer 2022 (pictured opposite).
- Chelmsford City Growth Package: Several elements including the Broomfield Road cycle scheme and



Improvement works, Wickford Station



**£19.1m  
of works  
delivered  
during  
2022/23**



**£16.8m  
of works  
forecast  
during  
2023/24**



Market Road cycle scheme were completed. The Tindal Square development was progressed for CCC by ECC and was completed in Spring of 2023.

- M11 J8 improvements was awarded to John Sisk (EHA2) in 2021 with works progressing during 2022 and planned completion in Autumn 2023.
- A127 Fairglen Junction improvements: went out to tender with evaluation in October 2020 and award anticipated in 2021. Delays resulting from land negotiations/CPO and DfT queries were progressed and resolved in Yr11 and ECC asked that contractors review their tender estimates in early 2023.

For Year 12, our focus is on getting Sections B & C of the Colchester RTS out to tender and the Harlow HIG Sustainable

Transport Corridor.

There is a very high focus on the Army & Navy scheme and progressing with the long-term improvements for this part of Chelmsford. The A127 Task Force faces significant challenges including the Air Quality agenda and the future ownership of the road. Our forward programme includes managing the tenders/delivery of the A127 Fairglen junction improvements (2023 - 2024), the delivery/completion of the M11 J8 on site and delivering the HIF and HIG schemes (2022 - 2025).

Our teams are involved in various initiatives which aim to increase the effectiveness of our support to ECC in delivering its Sustainable Transport objectives. There is an increased focus on mode shift and more sustainable travel to facilitate future growth in Essex. A good example of this was the removal of the Army & Navy flyover

which has enabled us to explore several alternative sustainable interventions (including Park & Ride, Cycling and walking) as opposed to a like for like replacement.

Our partnership approach with ECC promotes economic growth and sustainable infrastructure development by continuing to allow cities, districts, boroughs, and developers to access our local authority traffic models.

This helps to determine the impact of their proposed developments and potentially fund the maintenance and upkeep of the models.

Despite the challenging journey, the Major Projects team has a successful delivery record for the first 11 years of the contract and with appropriate management support, the team is well positioned to deliver the challenging Year 12 expectations.

# Public Rights of Way

The management and maintenance of 4000 miles of Public Rights of Way throughout the County which comprise footpaths, bridleways and byways to provide unimpeded access for permitted users



The Public Rights of Way (PRoW) team delivers inspections of the PRoW network, as well as programming and managing works on the ground. Additionally, we are responsible for engagement and management of the volunteers. Inspections of the PRoW network are undertaken in accordance with the Maintenance and Inspections Strategy for PRoW.

Over the last two years, we have implemented and embedded the first countywide model of the PRoW network hierarchy. Completed in March 2021, the PRoW hierarchy has enabled a targeted approach across all PRoW activities on the network and informed a Rights of Way Improvement Plan Review, which provided the PRoW business case for 2022/23 and beyond.

This statutory document (updated every 10 years), also captured other initiatives, including the Byway policy and an updated version of the Developer and Public Rights of Way Guide (2010) which affords greater protection for PRoW in the development process, as well as guidance on new PRoW creation.

Public Path Orders (PPOs) are required when it is necessary to create or divert paths as a result of road or drainage improvements, housing developments and following requests from landowners. PPOs are published to advertise and inform the public to ensure that the views of all interested parties are considered. Orders are split into two types, those made under the Highways Act (HA) and those we make on behalf of the planning authorities under the Town and Country Planning Act (TCPA).

HA Orders are charged against a framework with a basic set fee but there is an extra charge for additional add-ons. Essentially this means that the more PRoW are affected by an order proposal, the

greater the cost. Extra plans or orders associated with a PPO scheme are cost recoverable accordingly. TCPA Orders do not have a set fee and we recoup our officer time and costs such as advertising but they are sealed by the legal department of the relevant authority. The work is quite complex as there are over 115 elements we have to complete when making an order and they can take months to process. Over the last five years we have processed an average of 120 annually.

Some parish councils choose to maintain sections of their network themselves and this is managed through the Parish Path Partnership (P3) which comprises 39 parishes and 17 community groups (addition of the volunteers working in the Areas of Outstanding Natural Beauty -AONB).

Under the Headland Management scheme, landowners maintain sections of PRoW on behalf of ECC. Our team also manages the Essex Local Access Forum (ELAF) and undertakes Land Searches connected with house sales and purchases. The responsibility of maintaining the Definitive Map and Highway Records (which officially records the extent of highway ownership and any changes that have occurred) also falls within our remit.

Our Inspection team ensures that routes are accessible through regular, walked surveys and takes enforcement action when routes have been obstructed inadvertently or otherwise. Several long-standing enforcement cases were progressed last year. In Year 12, we will identify a small number (usually 3-4 depending on complexity and other ongoing cases) of cases to proactively address. We will also ensure improved crossfield reinstatement compliance by farmers and work with The Essex Area Ramblers on a number of cases which have been identified as high priority by their membership.

# Red and Green Claims

Red Claims are claims by third parties against the Authority arising out of the condition of its Network or the performance of the Service provider.

Green Claims are claims by the Authority against third parties for damage to the assets of the Authority within its Network and highway boundaries.

## Red Claims

Typically, a Red Claim is notified to ECC and investigated with the Red Claims Officer to determine liability. ECC makes an initial assessment of the claim and assesses whether the Highway Authority is liable to the third party, irrespective of allocation of ultimate liability between ECC and Ringway Jacobs (RJ).

If the claim is defensible, ECC issues a repudiation letter. If not defensible, ECC and RJ assess who is responsible. ECC then provides the RJ Insurance Team with the case file within 16 working days of notification.

If RJ is the responsible party: RJ will be liable for the outcome of the claim or any resulting court case and will meet its own costs of defending the claim and pay any sums ordered to be paid by the court. Ringway Jacobs will notify ECC within 10 working days that it has taken over conduct of the claim and will notify ECC, when a case is closed.

If RJ disputes liability: RJ provides details of the reason why it is rejecting the claim together with evidence to ECC within a further 10 working days, after which ECC either accepts liability or disagrees with RJ's assessment.

In the event of a dispute, an assessment of liability is carried out by an Essex Highways inspector (who has not had any previous involvement in the claim whatsoever and who has not previously inspected the defect) and a member of the ECC commissioning team (who has not been involved in the claim whatsoever or with the defect). The parties will assess and agree liability for the claim in advance

of any court hearing. While assessment of liability is being undertaken, ECC has conduct of the claim and must adhere to the deadline set by a court. If the parties cannot agree on an allocation of liability, the matter will then be referred to the Dispute Resolution Process within 28 days of referral as defined in the contract.

For claims under £500 - ECC assesses whether the claim under £500. If this is so, ECC determines liability and arranges the recovery of costs from RJ where necessary. If the liability of RJ for claims under £500 exceeds £25,000 in any one Contract year then RJ may require that the process is amended.

The level of these claims is reported to the Essex Highways Boards through the monthly dashboard. Ringway Jacobs reserves the right to sample audit these claims and, where it is agreed that these are settled incorrectly, raise a dispute. RJ handles any claims relating to direct works (schemes, resurfacing etc), rejecting or accepting depending on circumstances. RJ will hand over all claims to supply chain partners where necessary.

All personal injury claims are handled by specialist members of the team that have extensive experience in dealing with all aspects of Red Claims, assessments and costs calculations. The successful defence of claims relies on the timely completion of Safety Inspections and repairs backed up by substantive documentary evidence including decision criteria regarding intervention levels, measurement details and photos. The Red Claims Officer is fully conversant with Highway

Inspection Policies of all contracts. They will provide testimony and advice in court based on the Risk Based Approach for Highway Maintenance. They will explain how risks are calculated in order to ensure the most appropriate risk rating for the network.



## Green Claims

Through training and the establishment of 'good claims practice' we have significantly improved the collection of culprit data enabling us to maximise recovery of costs for damage caused to network infrastructure

The income that ECC receives from third parties is for the recovery of the costs incurred by the service in repairing the damage to the network assets. Recent years have seen an increase in income following an agreement on the schedule of rates used, resulting in a substantial reduction of outstanding invoices.

Green Claims are notified through various data sources. The vast majority come through the CONFIRM system and are Enquiries that come directly to us from members of the public. Automated notification from CONFIRM lands in individual and team inboxes and is monitored daily.

# Road Drainage

Essex Highways has a clear plan for prioritising the work to reduce preventable flooding incidents on our roads



There are more than 250,000 gully assets on the network including:

**Gullies** - to remove surface water from the highway.

**Slotted and grilled drainage channels** - more discreet types of gully to remove surface water.

**Catchpits** - chambers with an inlet pipe and an outlet pipe, allowing sediment to collect by removing it from the flow of water.

**Manholes** - inspection chambers for maintenance work.

The key objectives, drivers, and goals for this area of the service in 2023-24 are:

- To maintain the condition of the highway drainage assets to provide, as far as is reasonably practicable and affordable, a flood free highway and to ensure a safe network for road users in Essex.
- Continue to develop asset condition data.
- Contribute to a reduction in loss of control incidents resulting from standing water.
- Increase opportunities for the Highway Authority to successfully provide a robust defence for flood related insurance claims.

The maintenance of highway drainage assets is an important

aspect of delivering a safer network for road users in Essex.

We carry out cleansing on the PR1, PR2 and local roads network, district by district, following a two-year annual cyclic approach.

All cleansing data is captured in the Map16 Asset Management System (introduced in 2019) and updated during the routine cleansing operation. All defects identified during the cleansing operation are transferred from Map 16 into Confirm in readiness for high pressure jetting or civil engineering solutions to be prioritised and implemented (subject to funding).

The delivery of ad hoc drainage cleansing and jetting works required in response to specific weather events, e.g., flooding, and drainage assets in connection with other work projects is not included within the main service plan. However, the works and associated data are collected and mapped in Map 16.

The Map 16 system enables previous years' cleansing history to be imported into the system and for new cleansing data to be collected. This helps enable a risk-based, prioritised cleansing

of the PR network managed.

The management of drainage systems has been strengthened by using the link between the cyclical highway drainage cleansing approach and the ECC's Flood Management information. Electronic information on all drainage assets is captured along with data from incidents and inspections to support a more intelligent approach to maintenance.

The routine gully cleansing programme provides for the cleansing of the following types of drainage assets on the Essex network and includes recording the asset's location and its condition in Confirm:

- Road gully cleansing of all types
- Footway gully cleansing
- Catchpits / manholes
- Slotted and grilled drainage channel.

The cleansing activity for drainage assets is limited to the gully, catchpit and manholes and their immediate connection - cleansing of the main pipe runs are not included. Asset condition data is collected for each gully, catchpit, manhole and comprises

the location, time of cleanse, detritus/silt level measure and accessibility. For Year 12 (2023/24) as in previous years, Essex Highways has highlighted the need to maximise attendance to applicable assets, so as to support planned delivery. This means that all assets on the PR1 and PR2 network are cleansed at least once per year over a two-year cycle.

Assets on the Local Road networks are programmed for cleansing on a district-by-district basis, typically over a four to five-year cycle depending on resource availability. Additional cleanses are undertaken at known vulnerable locations/ flood hot spots i.e., Canvey Island and areas within ECC's approved Flood Management Plans etc.

During Year 11 (2022-23) three new gully vehicles were made available (pictured below), and it is anticipated that the one remaining older vehicle will be replaced in Year 12 (2023-24). This should continue to provide a significant improvement on reliability of the fleet and the consequential resource availability during Year 12. The approach for this year will be to undertake cleansing on:

- A127 - complete cleanse of all assets in Lane 1 and Lane 2 and the on and off slips and associated junction layouts (7 junctions in total).
- A13 - complete cleanse of all assets on this part of the network.
- PR network - once per annum risk-based network.
- PR network - Year 1 of the alternate years risk-based network.
- Local Roads in Braintree, Brentwood, Epping, Castle Point (part).

Surface Water Alleviation Schemes (SWAS) are projects to improve highways drainage systems. These can involve the replacement of pipes or implementing new drainage assets. The Asset Management team ranks proposed SWAS schemes by risk assessment and 12 high priority SWAS schemes are scheduled to be delivered by a capital funded programme in 2023/24.

An extensive network of watercourses and ditches forms an important part of flood risk management. As more intense and heavy rainfall events are experienced, the significance

of maintaining the capacity of these local drainage systems has never been greater.

Finally, another challenge has arisen in the guise of repeated thefts of drain covers. Essex has suffered hundreds of these over the last couple of years, in some cases having covers taken in large numbers along entire streets, leaving the service with a huge task in making safe and scheduling repairs. The high price of metal has led to thieves stealing the covers and selling them to scrap merchants.

Unfortunately, the service can't simply replace the cover itself, as each sits within its own frame. In many cases, the frames are very old and finding a matching product is not possible.

Replacement gullies and frames are not easy to source, particularly given the problems in national and global supply chains. Replacing both the cover and frame is time consuming and costly to the taxpayer - around £1,000 per lost cover/ frame depending on location - and can be more where concrete roads are involved mainly due to excavation.



# Road Safety

To ensure people enjoy safe travel on our highways with the key aim to reduce 'Killed and Serious Injuries' (KSIs) towards the vision of zero deaths and serious injuries



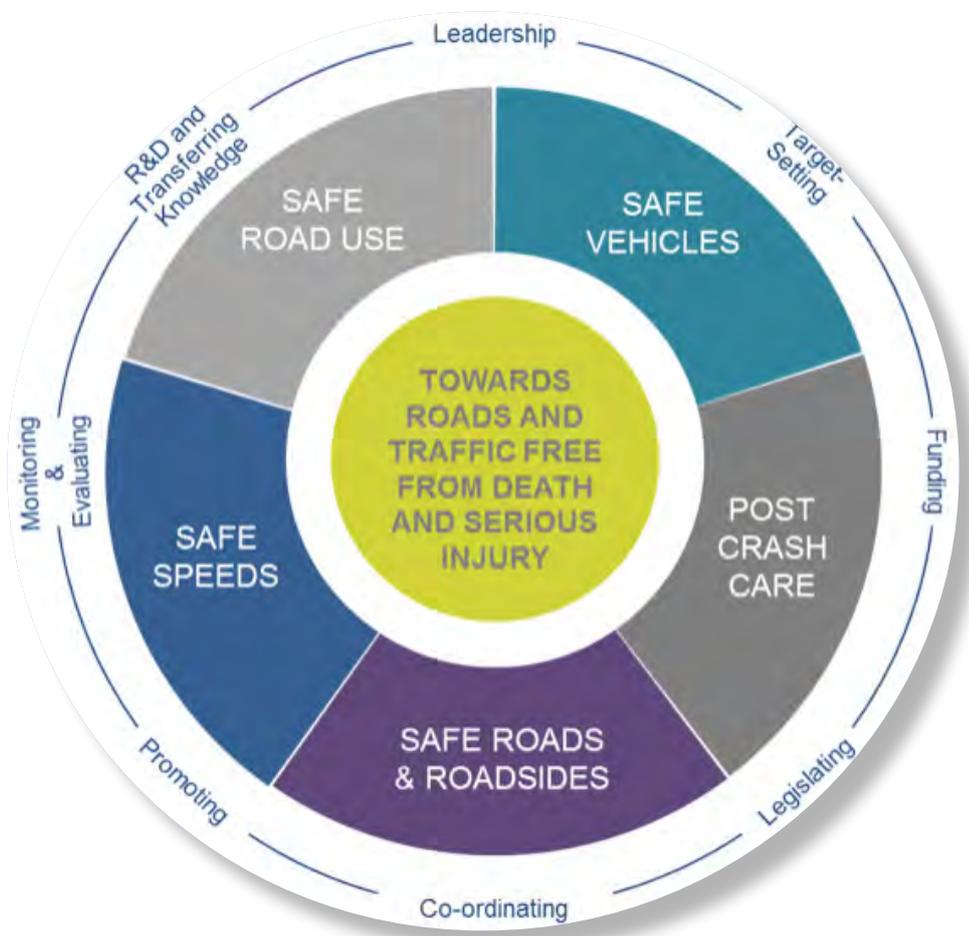
The Road safety team delivers Essex Highways' (EH) contribution to the Safer Essex Roads Partnership (SERP) delivery plan, to achieve its "Vision Zero" goal, improving safety on the roads through the provision of training courses, education, enforcement, publicity and community engagement activities.

We are working to embed and support the "Safe System" approach across Essex Highways and to elevate the priority given to safety and the reduction of risk for all road users in every scheme that Essex Highways delivers.

ECC and EH, as part of SERP, have committed to Vision Zero - to achieve zero deaths and serious injuries on Essex roads by 2040: with an interim target of halving deaths and serious injuries to 415 or fewer by 2030.

This challenging ambition necessitates a rethink of road safety, based around the development of a transportation system that provides layers of protection for the user; accepting that users make mistakes, known as the Safe System approach (see diagram).

**Diagram 1: THE SAFE SYSTEM APPROACH**



Road Safety focus for Year 12 will be on the delivery of certain EH activities including:

- The delivery of National Driver Offender Retraining Scheme (NDORS) courses on behalf of Essex Police (administered through a team of 13 staff).
- The organisation and delivery of multi-partner Vision Zero engagement days, of which approximately 20 will be in Essex and which will include School Speed Watch activity and Community Speed Watch groups wherever possible and a further 30 days of engagement delivered by the EH team.
- Training and support to Community Speed Watch groups which may include Speed enforcement by EH staff with delegated powers from the Chief Constable.
- Engagement with Essex businesses in association with other ECC teams engaging with businesses.
- Promotion, delivery, and evaluation of Driving with Confidence courses delivered free for drivers aged 70 years and above.
- Support for development of campaigns and provision of face-to-face delivery of campaign messages to appropriate audiences.
- Increase Parent and reception-age child walks offered to 300 schools.
- Year 5 road safety training offered to all 400 Essex primary schools.

- Increasing the number of school pupil volunteer road safety ambassadors to deliver peer to peer messaging (45 secondary schools/colleges)
- A trial of the road safety ambassador programme in 15 primary schools.
- Provision of targeted messages through Theatre in Education to year 7, 9 and 11 age groups.
- Delivery and evaluation of uptake and outcome of new digital Roadster to year 12 students offered to all schools. (These services are funded by SERP, ECC has no operational road safety budget, an annual saving of £800k since 2014.)

Through being a member of SERP, EH also benefits from the delivery of road safety activities by other partners. These include motorcycle training including 'first on scene' training, targeted safety campaigns and materials such as magazines, young driver engagement and training, engagement with groups such as those not in employment, education or training, Community Speed Watch, Extra Eyes, additional SERP funded roads policing and improvements in post collision response through the attendance of the Essex & Herts Air Ambulance Trust helicopter or car.

Additionally, the operation and maintenance of all approved safety camera housings

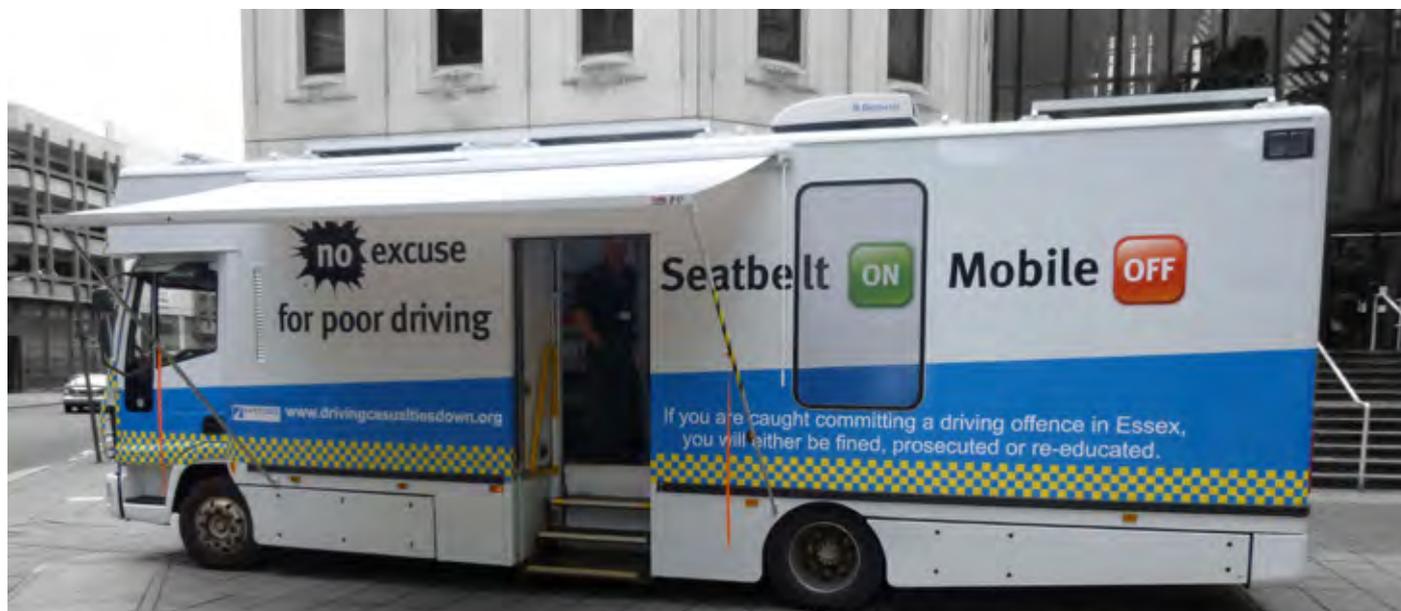
provided by EH is funded by SERP. EH has some direct responsibilities for delivering the 'Safe roads and roadsides' element of the safer systems approach outlined in the SERP's Vision Zero Strategy.

SERP has facilitated an iRAP (International Road Assessment Programme) assessment of sections of the A127 and A414 as a means of understanding risk reduction approaches and the programme's star rating system.

The iRAP approach has been used to prepare a bid for funding for a scheme for A104 and will be used to prepare a scheme for A113 this year.

Further work on safety performance indicators (SPIs) is required at a national level and the SERP Partnership Manager is on the national development group. Further options to integrate the safe system approach in all schemes designed and delivered by EH will be explored and developed to understand the responsibilities and options for delivery.

The Safe System approach needs to be integrated with, and complement, other strategic goals and requirements such as Safer, Greener, Healthier, and wider ECC objectives such as addressing climate change and the economy if EH is to deliver a common vision, working collaboratively, seamlessly and with integrity and transparency.



# Street Lighting

The provision of cost effective and efficient lighting for the safety of users of the roads, footways and cycleways



There are approximately 131,000 lighting columns, 12,000 illuminated signs and 5,600 bollards on the network. We repaired 19,408 faults on streetlights in 2022/23 and a similar number of repairs is expected in 2023-24.

Our aim is to keep these assets in a safe and serviceable condition, to maximise their service life and reduce ongoing energy usage and reactive maintenance costs. Street lighting assets have a high maintenance cost and energy expenditure. The Streetlighting team is responsible for lighting design, asset management, maintenance, supervision, software and data management, programme management and electrical engineering

ECC budgets include a significant amount for revenue maintenance and energy on an annual basis. Not only is this costly to Essex but it is unsustainable for the environment and street lighting contributes £150,000 pa on carbon taxes.

This is why we started to change all our lights to LED in 2015/16. LED lights are more sustainable and offer better value for money. We will also have better control over the brightness of the new units, so that they can be dimmed depending upon the surroundings.

Phase 3 of the LED replacement scheme was completed in 2019 and comprised more than 23,000 units. These will help reduce energy consumption and maintenance cost savings over the next 20 years as the lamps having a longer design life.

LED Phase 4 commenced in mid-May of Year 10 with works taking place in Chelmsford, Basildon, Colchester and Tending, which saw crews replacing the first of the remaining 82,000 old-style streetlights ECC operates. In Year 11 work was carried out in Colchester, Tending, Braintree, Epping and Castle Point. Works in Years 10 and 11 resulted in a reduction in energy and carbon of 74% of the units replaced - over 500 tonnes. By the end of 2022, we had upgraded a total of 40,325 luminaires (37,000 units through the main programme and 3,000 units through maintenance activities).

Wednesday 26 April 2023 marked a major milestone in our LED streetlight replacement programme with the installation of the 100,000th unit in Bracken Drive, Chigwell. Reaching this important milestone was particularly gratifying as LED Phase 4 of the programme was significantly impacted by the global shortage of components for the telecells that are used to control the streetlights.

This was due to major events out of our control such as the effects of the pandemic lockdowns and the war in Ukraine. Our telecells manufacturer was unable to supply materials from April until the end of September 2022.

We mitigated this risk for the most part by ordering a surplus of stock before the shortage hit but we were still slightly behind our target programme.

Despite this, a recovery programme was agreed with our contractors to ensure works are completed by the end of the financial year 2023/24.

Once the rollout is complete, a proposal for a repair hierarchy has been developed and will be included in the Service Plan. LED lights bring many benefits

for both residents and the environment as they save on average around 75% energy usage and 1700 tons of carbon emissions involved in generating electricity.

The replacement will also mean a better service and more effective use of taxpayer's money, as the LEDs are expected to last 20 years, whereas 20% of all sodium lamps fail after four years and must be replaced.

Elsewhere, Cable faults are becoming a far bigger part of our ongoing maintenance. Our cable fault crews will identify cables which have reached the end of their design life and, by analysis of the test results, will then overlay cables, replacing the cable between two access points.

The new cable will be recorded on the management system (Mayrise), a legal requirement under Highways Authorities and Utilities Committee Code Of Practice For Recording Of Underground Apparatus In Streets.

To further comply with the above, we will start in Year 12 to identify the private cable network owned by ECC.

We will need to identify the 28,000 private connection (access) points and the associated connecting cables, to ascertain those owned by ECC or others and additionally how many of these require replacement. We plan to identify and test 4800 connection points and their cables in Year 12.



# Streetworks

Management and permitting of all road works on the highway and co-ordination of works to minimise disruption to the travelling public while maintaining safety



The Street works team is responsible for the management and permitting of all road works on the highway. Through the ECC Permit Scheme, the team co-ordinates works to minimise disruption to the travelling public while maintaining safety.

This is demonstrated through low levels of deeming permits and through congestion levels around works being reduced as far as possible. The team ensures that works are carried out to the appropriate safety standards, measured through numbers of failed safety inspections and is dependent upon compliance of all works promoters.

In 2021/2022 a dedicated broadband inspection team was formed to better protect the asset, working closely with the Essex Broadband team and tasked with checking and driving works forward to make sure Essex is one of the first counties in the UK to be fully covered by a full fibre network.

As it did last year, this team will continue its work throughout 2023/2024, in league with the Essex Super-fast Broadband team. holding monthly meetings with all fibre installers to maintain pressure on contractors to maintain quality of works. Their work contributes to the better protection of the Highway while maintaining safe passage for all highway users.

Currently, the team checks 50% of all completed works and defects accordingly. Where works promoters fail to maintain standards, we establish improvement plans as set down in Streetworks legislation with the objective of having them demonstrate improved performance. The Streetworks team also uses opportunities through enhancements to **one.network**, using it to its fullest, with the objective of providing enhanced information to the public and more efficient processes for the organisation.

# Streetworks key tasks Year 12 2023/2024

**Operate the ECC Permit Scheme – 110,000+ applications are expected to be processed in 2023/2024 with increases expected due to the further acceleration of the broadband rollout.**

Deliver a programme of inspections – 10% category A & B inspections and 30% category C inspections of road works equating to 41,000 sites being inspected in 2023/2024. Of these a minimum of 9100 will be funded by utilities (£50 per inspection – as defined in legislation)

**Deliver a programme of coring of reinstatements that will further protect our asset – approx. 200 cores every four months (600 cores per annum) at a total cost pa £28,000. We anticipate this will be a cost neutral service.**

Respond to requests for TTROs to facilitate road works and schemes. A total of 2668 temporary orders were processed in 2022/2023 comprising of TTRO's 1350 and TTRNs 1106. It is estimated that a total of 2456 TTRO/TTRN will be processed in 2023/2024 (not including EH's own works).

**Undertake skip and scaffolding inspections – approximately 1400 skip licences and 580 scaffold licences will be assessed in 2023/2024.**

Process and issue all invoices relating to Street Works – in 2023/2024 we estimate 3120 invoices will be served, including TTRO invoices as each one has a separate invoice.

**Identify and serves all relevant Fixed Penalty Notices. In 2022/2023 these included 134 'working without a permit'; 1825 breach of conditions, 1005 'late registrations', and 1916 'late start/late stop' permits for utilities with a total of 4611 FPNs, an additional 780 EH @late stops/late starts, 12 Working without and 11 breaches of conditions.**

Delivers the stats enquiry service – approx. 12,000 enquiries pa.

**Implement and has embedded a strong performance ethos within the team, driving improvement in utilities performance through accurate targeted inspections and the levying of correct penalties.**

Investigate and produce a feasibility cost/benefit report on the option for a lane rental scheme in Essex.

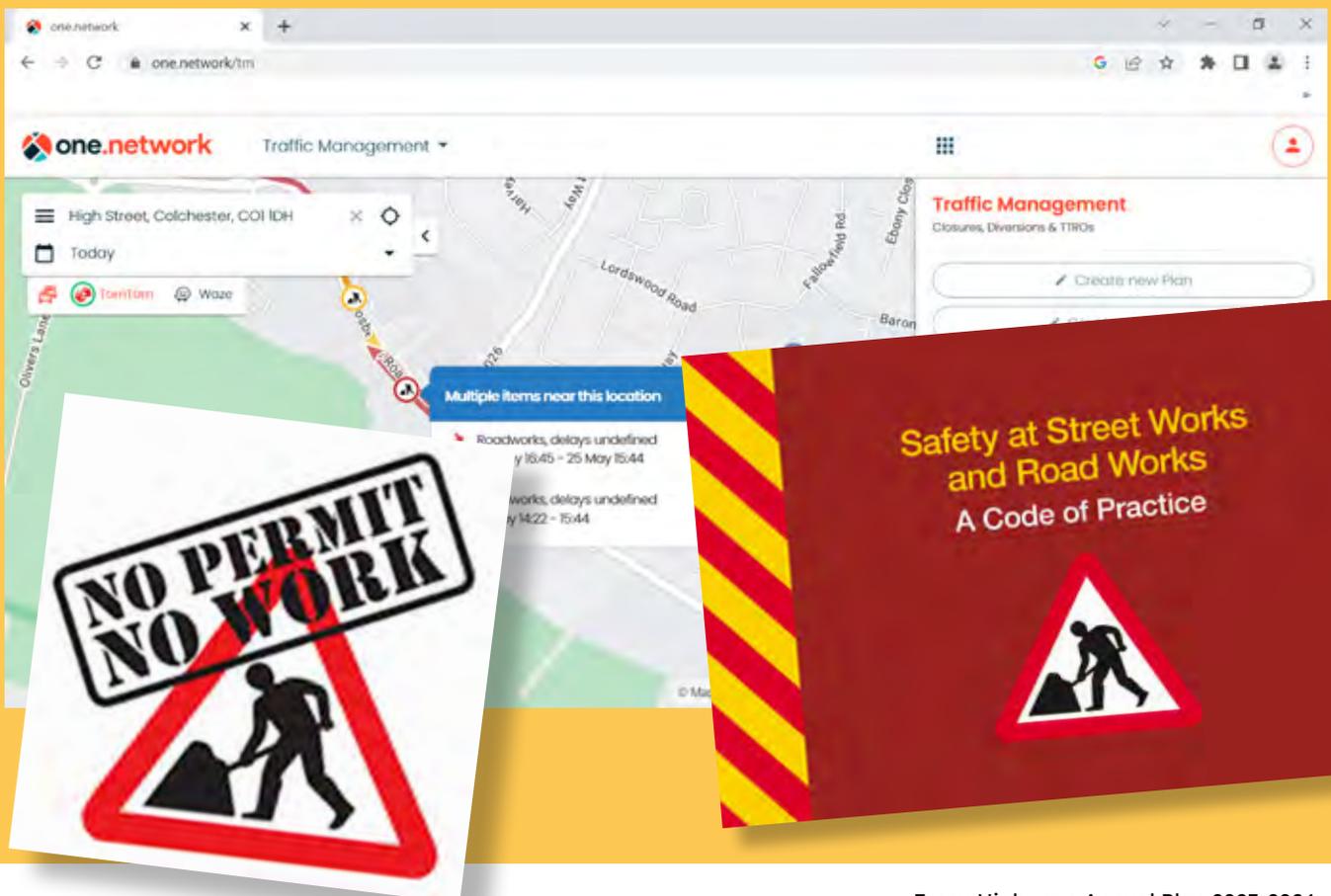
**Implement better monitoring processes of all work streams to drive efficiencies**

Power BI is now being used to monitor and drive better performance of both the utilities and staff.

**Through better data, individual training programs are being developed and implemented.**

Work with providers to ensure that the national programme of the rollout of super and ultra-fast broadband over the coming years can be supported in Essex, minimising disruption, and protecting the highway asset

**Section 58 protection has now been added to any works that meet the criteria set by the Department for Transport (DfT).**



# Traffic Management

The provision of efficient Traffic Management for the safety of users of the roads, footways and cycleways

**The Network and Safety function delivers the Network Management Duty of the Traffic Management Act supporting the safe and efficient movement of people and goods around and through the county.**

The Network Operations team is responsible for the real-time management of incidents and events, along with planning and agreeing traffic management requirements for events.

The Essex Traffic Control Centre (ETCC) plays a pivotal role in maintaining access to the road network broadcasting information to road users via many sources. The ETCC has a wide range of deliverables.

It responds to incidents and congestion/delays on the road network, working with all relevant agencies by taking action to control traffic to ease or manage congestion or closure and maintaining contact with the travelling public within operational parameters.

Working with the Intelligent Traffic Systems (ITS) team, the ETCC develops and implements new systems and controls. The team Liaises with promoters of major schemes (both internal and external) to ensure that Variable Message Signs (VMS) and other media forms are used to advise travellers of planned works.

Using a variety of media both at the roadside and remotely, the ETCC communicates live network performance. It uses Twitter (approx. 55,656 followers) as a further way to communicate.

As a proactive member, the ETCC attends Safety Advisory Groups (or other meetings regarding events) across Essex to form links with borough/city/

district councils and external event organisers, to support the management of events locally, ensuring they are run safely, minimising the impact on the road network.

These range from small charity events such as local village fêtes to nationally significant ones such as the Tendring Motor Rally or any network management requirements that may be needed.

The ETCC also Provides Network Operations intelligence/insight regarding new schemes on the network and their potential impact/benefit/dis-benefit to its operation, supported by the knowledge gained through the ETCC on the daily operation and performance of the network.

Updating of the **one.network** website following liaison with all district/borough, city councils and external event organisers is another of the team's responsibilities, ensuring a coordinated approach is in place for all activities and arranged on the network. This includes events and road closures.

Approximately 150 events were added in 2022-23 including many requiring Temporary Traffic Regulation Orders for closures and other restrictions to be put in place to manage the network.

234 events were communicated to us by local borough/city/district Councils using Town & Police Clauses Acts (T&PCAs) to close roads for local events.



Team representatives attend national and regional “enforcement” user group meetings to maintain knowledge and influence the national agenda, particularly around issues of concern in Essex.

There is typically one regional meeting every six months and one national meeting every six months. Essex Highways Chairs the national user group.

The ETCC continues discussions with Thurrock Council (and others where opportunities arise) to establish an agreement for Essex Highways to undertake Bus Lane Enforcement on their behalf.

The team supports the two Parking Partnerships in Essex, providing policy guidance and attends approx. 20 meetings annually

(providing support and briefings for the Cabinet Member as required). Work with both Parking Partnerships is also undertaken on defined ECC transformation projects devised to generate income, such as additional paid on-street parking.

The ETCC also attends the Regional and National Traffic Managers Forums, and is Chair of the regional group. (Quarterly meetings for each).

Finally, the ETCC leads within Essex Highways on Smart Technology, contributing to the technology forum, projects identified, bidding opportunities etc.; supporting delivery of the projects identified in the Essex Highways Innovations Tracker and the ECC Technology Strategy for Transport.



**5**  
Traffic signal renewals were completed during 2022/23

**5**  
Traffic signal renewals are confirmed for 2023/24

Duke Street, Chelmsford



The deliverables of this team for 2023/24 are: -

- Respond to incidents/ congestion/delays on the road network, working with all relevant agencies to control traffic, ease or manage congestion or closure and maintain contact with the travelling public within operational parameters; use hot/cold debrief processes with agencies to learn from incidents to better manage future situations.
- Work with the Permit team to pre-empt the impact of planned and emergency work that occurs on the network, taking appropriate action when necessary; make use of tools available via **one.network** such as “Replay” as a debrief to understand how delays develop, to help improve future roadworks, events and other activities.
- Through day-to-day monitoring of the road network, we will identify sites that have regular congestion/ delays. Where these are Intelligent Traffic System (ITS) sites, we will work with the ITS team to develop control strategies to manage/ alleviate these delays where possible.
- Liaise with promoters of major schemes (both internal and external) to ensure that Variable Message Signs (VMS) and other media forms are used to advise travellers of planned works.
- Use a variety of media both at the roadside and remotely (including social media) to communicate live information on network performance.
- Attend Safety Advisory Groups (or other meetings regarding events) across Essex to form links with borough/city/district councils and external event organisers to support the management of events ensuring they are run safely, minimising the impact on the road network. Implement agreed ECC charges for advice where agreed and applicable. Manage between 50 to 150 events (higher number this year due to the King’s Coronation.)
- Provide Network Operations intelligence/insight regarding new schemes on the network and their potential impact/ benefit/supported by ETCC knowledge of daily operation and performance of the network.
- Actively use and develop **one.network**, inputting events, road closures etc. Use the functionality of **one.network** to increase knowledge of the road network and continuously improve the management of events and response to incidents.
- Manage the bus lane enforcement process and provide advice and guidance on the proposed enforcement of other bus lanes/gates (predicted total of approx. 100,000 issued in 2023/24. 20 enforcement cameras currently installed and operational. This is predicted to rise to 22 by the end of March 2024.
- Continually monitor resource requirements to ensure the most efficient cost neutral processing of Penalty Charge Notices (PCNs) is achieved.
- Attend national and regional “enforcement” user group meetings to maintain knowledge and influence the national agenda, particularly around issues of concern in Essex. (One regional meeting every six months; One national meeting every six months – Essex Highways acts as Chair to these user groups.
- Work with ECC in offering advice and guidance regarding the requirements for future enforcement of existing or new bus lanes/gates.
- Support the two Parking Partnerships, providing policy guidance, and attending approx. 20 meetings annually (providing support and briefings for the Cabinet Member as required).
- Work with both Parking Partnerships on defined ECC transformation projects to generate income, such as additional paid on-street parking.
- Attend Regional and National Traffic Managers Forums as Chair of the regional group. (Quarterly meetings for each).

# Winter Safety

Aiming to keep roads, as far as reasonably practicable, free from ice and snow, for the safe and expedient movement of the travelling public

**The Winter service period in Essex is between late October to early April, using 59 salt-spreading vehicles to treat approximately 2000 miles of roads. The salting network can be viewed on the ECC website.**

Winter service will commence on Monday 23 October 2023 until Sunday 21 April 2024, with a 26-week standby for drivers on a two-week rota delivering up to 49 routes, plus two mini gritter routes. Double shifting over the Christmas and New Year period provides resilience to delivery.

Each vehicle delivers a mix of rock salt and brine solution which improves the adherence of the treated salt to the road surface. In instances of heavy demand, dry salt can, and is, also used if temperatures fall below  $-6^{\circ}\text{C}$  or during snow conditions

the effectiveness of salting is diminished. In severe weather or heavy snowfall, delivery is adjusted accordingly and any significant build-up of snow addressed by ploughing.

Essex has ten weather stations located at strategic locations around the county combined with specialist road surface forecasters who determine the weather and its likely effects across all parts of the county network. The successful introduction of route-based forecasting three years ago has allowed us to appropriately focus our attentions on the network where the need is greatest.

The accuracy of the Meteo Group route-based forecasting tool is currently being validated (RBF) which should provide EH with a greater awareness of the cold and hotspot areas of the network. The

aim of this is to allow a reduction in potential salt usage by focusing on specific routes. The data is subject to ongoing analysis.

Town Councils, Parish Councils and other organisations are invited to sign up to the Salt Bag Partnership prior to the winter season where the delivery of one- tonne of bagged salt is provided to help treat local areas. The scheme also covers urban un-parished wards. We are very grateful to our network of many farmers who are prepared to plough local roads when required, following snow fall.

It costs in the region of £1.6m to prepare and provide the resources required to be able to respond to the weather conditions. The average cost of treating the network is £1.0m but this is dependent upon the weather.



In Year 10, we undertook analysis of our gritting routes with particular focus on those that were consistently treated in the quickest times.

As a result, we trialled consolidating 10 of our quickest routes into five longer routes for that year's winter season, seeing how long these new routes would take to treat. Most of them were not too long over our targeted three-hour treatment time, from depot gate to depot gate.

By implementing these changes we realised a permanent saving of five gritting lorries, five associated LGV drivers (staff that we have traditionally found challenging to recruit in some parts of Essex) along with the associated costs in vehicle maintenance and fuel savings.

Having completed the Year 10 trial, we undertook an exercise, in advance of Year 11, to further optimise all our routes using in-house GIS analysis and the Exactrak navigation system.

The idea was to transfer some roads on longer routes to adjacent shorter routes, thereby levelling up the distances driven, resulting in treatments being delivered more evenly across our gritting routes.

This optimisation exercise showed that we could treat almost the same network within a three-hour treatment time but using eight (5+3) fewer gritting lorries. We also significantly reduced the 'dead running' distance.

In Year 12, we aim to take this exercise a stage further around the Colchester area making a further

reduction of two more gritting lorries and LGV drivers.

The outcome of this transformation work over the last three winter seasons is that we have reduced the number of gritting routes by 10 - from 57 routes to 47. This has realised a significant saving of approximately £250K during a typical Essex winter season.

The maximum time taken to treat the network is the same, the vehicles can still treat all the network without running out of salt and the treated network length is almost the same as in previous seasons. This is an excellent example of the transformation programme helping us deliver the same level and standard of service but at considerably less cost and Co2 emissions for our client and the taxpayers of Essex.





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**Essex Highways**

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