



ANNUAL PLAN 2020-21



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FOREWORD

Essex County Council appointed Ringway Jacobs in 2012 to undertake our highways work and much has been achieved. Using data and asset knowledge we have focused our resources, improved our main roads, and helped Essex County Council achieve 'Transport Local Authority of the Year' in 2017. Ringway Jacobs was awarded a full, five-year contract extension in February, ensuring continuation of service until 2027

COUNCILLOR KEVIN BENTLEY

Deputy Leader, Essex County Council
and Cabinet Member for Infrastructure

In the two years I have been the Cabinet Member for Infrastructure, I have enjoyed working with the service to make changes so that people actually see and feel the improvements we have already made in their local areas.

Much of the success of our stewardship of the Essex highway network can be attributed to the effectiveness of the award-winning strategic partnership between Essex County Council and Ringway Jacobs. In March this year the council awarded Ringway Jacobs the maximum five-year extension to its current 10-year highway network management contract.

The extension, following the most intensively examined, independently benchmarked and scrutinised contract review process in the County Council's history, will run from 1 April 2022 until 31 March 2027. This decision demonstrates the continued benefit the local authority sees in the unique value that Ringway Jacobs brings to the council and the Essex public through its integrated, asset-management led highways solutions.

Of course, shortly after this announcement, the world needed to repond to the Coronavirus emergency. Throughout the emergency, Essex Highways has continued to deliver essential work, vital to maintain a safe network, particularly for emergency services, key workers and essential supplies. The service rapidly adjusted its scheduled activities and ways of working in order to ensure public and employee social distancing, adhering to government advice as the situation developed. The situation may affect some of the planned works described in this Annual Plan for 2020-21, but at the time of writing it is too early to tell what might change and where.

The challenge of dealing with the Coronavirus aside, as well as the day-to-day routine maintenance that many of us work on, our work is also helping the Authority focus on the longer-term future economic growth and technological challenges facing transport infrastructure in Essex.

We will be helping to create the stepping-stones that help us realise the vision we have for 15 or 20 years' time. We have a huge role to play in the way we improve the county's mobility needs, a prospect that is genuinely exciting. All of this, helps us deliver a safe highway network everyone can be proud of.



INTRODUCTION

This Annual Plan provides an overview of the strategy to deliver task orders and budgets as detailed in the individual 2020-21 Service Plans, and highlights both service delivery achievement and priorities for this year



Essex Highways is a collaborative delivery partnership, created in 2012 by Essex County Council and Ringway Jacobs, to manage and deliver local highway services from the amalgamation of 10 separate highway contracts

Essex Highways comprises both Essex County Council 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 5,000 miles of roads, 1,500 bridges, 4,000 miles of Public Rights of Way and 127,000 street lights. It is the seventh largest network in the country and has some of the heaviest traffic flows.

Natural deterioration, increased volume use 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 focus is on ECC objectives which are:

- Help realise ECC's Strategic Aims
- Meet customer needs
- Obtain value for money
- Promote improvement and innovation
- Reduce the cost of the Service

These objectives are to be achieved by delivering and improving 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, Essex Highways 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. 2020 began with ECC awarding Ringway Jacobs with the full five-year Essex Highways contract extension...

In February this year Essex County Council (ECC) awarded Ringway Jacobs the maximum possible five-year Essex Highways contract extension which will run from 1 April 2022 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 Essex Highways contract has been a great success and with two years left on the current contract, the partnership looks forward to the next seven years of work ahead of us. This illustrates how successful the integrated partnership model is. There is a fantastic team of people in Essex all them contributing to what has proven itself to be a genuinely ground-breaking and award-winning partnership.

The contract extension enables the partnership to continue this legacy and deliver an enhanced, innovative, industry leading service, while looking at making environmental and efficiency improvements for the citizens of Essex. It can continue to pull-through technological, material and digital innovations and deliver high levels of customer service.

The partnership's approach to Asset Management has seen it gain successful accreditation to BS ISO 55001 Asset Management, no easy task given the scale of the challenge, the size of the network and the complexity of the infrastructure in Essex.

This has helped Essex Highways consistently achieve Level 3 DfT Incentive funding over the past three years – in fact one of the strengths of the contract is that it's managed to pull alot of external funding in, such as the HIF funding announced last year. Over 50% of the money that was allocated for the first tranche was given to Essex.

We are continually improving the highway network, reducing cost through innovation, delivering efficiencies, while helping Essex achieve its Strategic Aims. The service directly helps to enable inclusive economic growth, but also helps to create great places to grow up in, to live and work. There is much more to do and more challenges to face, but the contract extension acknowledges the numerous and significant successes so far and endorses the capability of this truly excellent partnership.



HEALTH & SAFETY

'Think Safe, Home Safe' has become 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 honed annually and encourage staff to focus on appropriate themes each and every month throughout the year, supported by online training modules and Tool Box Talks.

Positive Mental Health is key to the well-being of our people and forms part of our ongoing cultural change journey to improve health and safety standards.

2017 saw the launch of 'Open Minds, Healthy Minds' our vehicle to embed and implement awareness of positive mental health into our culture.

In 2018, our 24 trained Positive Mental Health Champions responded to 72 members of staff who requested their help. By the end of 2019, 202 members of staff (40%) had received assistance.

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%.

Following this, Ringway Jacobs was awarded a renowned Sword of Honour from the British Safety Council (BSC) in 2019, joining the small number of elite organisations worldwide that have achieved this accolade.

The Sword of Honour is awarded to companies that have demonstrated excellence in the management of health and safety risks at work.

The BSC's Sword of Honour and Globe of Honour represent the pinnacle of achievement in the world of health and safety management. Successful applicants, demonstrate that they are among the 'best of the best'.



Our approach is recognised beyond Essex. As well as being one of the first organisations worldwide to achieve ISO 45001 for health and safety management best practice, Ringway Jacobs has been awarded a ROSPA Gold Award for three consecutive years, recognising our consistently excellent and continuously improving performance and innovative approach to health and safety.

A key risk area for Ringway Jacobs is Roadworks Incursions and Abuse. As a result, Martin Cahalan, the company's Head of HSEQ, headed up a project group for the Highways Term Maintenance Association (HTMA) to understand how best to facilitate a national approach to deal with this problem.

The first step was to pull together the data on how big an issue this is nationally, to then take the matter to policy / law makers and see whether we can change how authorities such as the Police respond to road worker abuse, or whether the laws around this can be improved so that there are more significant consequences when it happens.

It may take some time to effect any change, but efforts will continue through 2020/21 to ensure that our operatives get more protection from members of the public who cause this problem.

Our operatives are urged to report every incident of this type and now also use personal CCTV to capture incidents and evidence if they happen.



ROADS

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

Essex has maintained the 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 £4.119m) during 2020/21 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.

The strategic direction for 2020-21 is to maintain the condition of the PR1/PR2 County routes, while capital funding focus is on local urban areas, in part to address residents’ concerns.

Defects fixed 2019/20

P1: 3773

P2: 2687

P3/4: 17831

Expected numbers 2020/21

P1: Similar to last year

P2: Similar to last year

P3/4: Similar to last year



Member-led Local Pothole Repair Programme

The Member-led Local Pothole repair programme was introduced in Autumn 2018, and hundreds of specific carriageway potholes reported through the programme were fixed. Overall more than 6000 defects, were repaired with work completing in June 2019. Coupled with the regular repairs we deliver based on our safety-led priorities, we significantly reduced the number of potholes on our Essex road network.



FOOTWAYS

Essex Highway's strategy for footways is to deliver condition improvement to heavily trafficked assets while maintaining usability of the remaining network.

Pre-patching and civils work delivered throughout the year facilitates the delivery of slurry works during the optimum time of April-September - adopting this activity in the later period of the year, helps optimise delivery in the preceding year.

However, impact from the Coronavirus emergency could affect the delivery of this activity.

The original intention is to deliver all slurry work by the end of November. Works not completed by this date will be rolled into year 10. Any surplus budget for this activity will be re-allocated to deliver additional patching sites as preparation for the slurry treatment in year 10.

VERGE CUTTING

Verge cutting is an important aspect of keeping roads and footways safe for users. Roadside verges get cut back to preserve sightlines and keep them clear of overhanging trees and shrubs and we pay 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 we do the bulk of the work at night because the necessary traffic management - traffic lights and lane closures - would otherwise cause congestion.

At the same time, the first weed spray (of two annually) is done in Braintree, Colchester, Maldon and Uttlesford, with other areas following.

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 makes their own arrangements.



18534 km
of weeds
treated in
2019/20
similar number
expected
2020/21

6788 km
of grass
verge cut
2019/20
similar number
expected
2020/21

QUALITY

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

Quality is managed through site inspections / audits which are carried out by the 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 the '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 £4.1m in 2019-20. In February this year, British Standard auditors recommended our re-certification to BS ISO 55001 for three years and stated that our performance has remained consistently high.

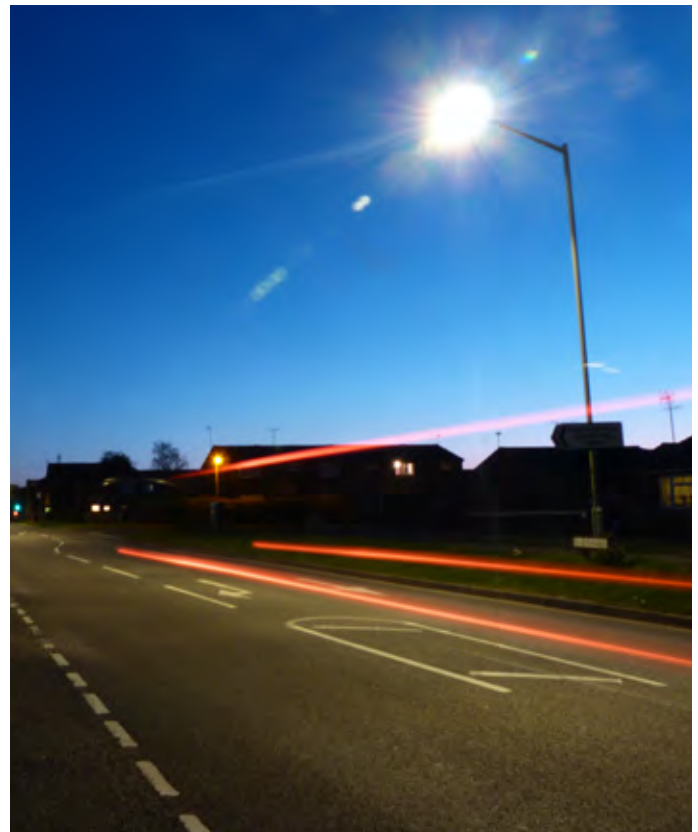
Essex Highways is now re-certified for three years and this will re-assure other external bodies, including the Department for Transport, when assessing us for the Incentive Fund and other initiatives, helping to secure additional funding for Essex County Council's highways service. The certification is currently for carriageways and footways, however, our ambition is that we can expand this to cover all highway assets at the next re-certification.

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 the RJMS (Ringway Jacobs Management System) to ensure its continued fitness for purpose.
- Maintaining 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.

- It is the aim for Year 10 to extend 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 process to ensure that they are closed in a timely manner and the corrective and preventative actions are clearly and accurately identified.
- Development of the KPI Framework and reaching agreement with ECC
- Collection of Performance Indicator results from the various sources and collating into a summary report.
- Production of KPI Dashboard report monthly.
- Production of EHB Dashboard report monthly.
- Attendance at the Performance Management Meeting (PMM)
- Attendance at Dashboard Review Meeting
- Attendance at the Contract Review Meeting (CRM)
- Maintain the Business Continuity Plan and liaison with ECC to ensure contractual compliance.



EFFICIENCIES & 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. This process may be revised and streamlined once the revised contract mechanisms are agreed and implemented. The team is responsible for:

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

Our focus is on delivering those efficiencies where budget reductions (cashable efficiencies) can be made. These can either be one-off cost reductions (a change of material or process for an individual project) or the renegotiation of supply chain contracts.

System developments are also key to gaining service improvements with a particular focus on the electronic handling of information, enabling the service to become more data/intelligence led. We have already:

- Introduced multi-year programmes for Intelligent Traffic Systems, gully cleansing and LED Phase 4
- Used business analytics and reporting tools such as

Microsoft Power BI and Map Essex, ensuring the right up to date information is available

- Working with Hertfordshire (the first county to achieve this) we manage road closures in real-time, sending information directly to road users via apps such as Google Maps.
- MAP16 which analyses gully cleansing data enabled the introduction of an optimised future cleaning frequencies on a two-year cycle - this went live during summer 2019.

Essex Highways is continually introducing new innovations and new technology on the network to improve efficiency, drive quality and exploit sustainable energy.

This year, for example, we are trialling electric diggers and started using hydrogen powered lighting on sites. We are also trialling eco-friendly techniques such as using rubber kerbing and NuFlex surfacing, both of which being manufactured by using recycled lorry tyres.

This year, we are delivering the 2020 Innovation Programme which will see the team deliver and promote one innovation per month as per the plan.



ASSET, RECORDS MANAGEMENT & INSPECTIONS

ASSET TEAM

Through using best practice, the Asset Team ensures delivery and compliance in accordance with the integrated asset management-led policy and strategy, maximising the benefit of investment across all Essex County Council assets.

The team ensures that asset data systems are kept up to date, are fit for purpose and that accurate data is readily available for internal and external customers and stakeholders. The team provides prioritised asset derived information to drive the organisation's long-term forward programme.

RECORDS TEAM

Economic growth in Essex is facilitated by providing a prompt and efficient land charge enquiry service to District Councils.

The Records Team delivers the statutory functions associated with the Public Rights of Way (PRoW) service which provides public access to the Essex countryside and promotes the amenity value of the PRoW network.

A review of legal records is underway to ensure that they are current and accurate for the definitive map of PRoW and the Highway Record. The system is being developed to enable the public to self-serve using web-based IT.

INSPECTIONS TEAM

This team has been established for several years, and carries out Highway Safety Inspections and inspections on PRoW and has a reputation for delivering consistent, quality services.

The team's extensive knowledge and experience, means that staff, if and when called upon, provide evidence at court in defence of third party claims against Essex County Council and Ringway Jacobs.





ASSET AND RECORDS

Over the next five years, ECC will continue an asset-led strategic approach taken by ECC, considering the requirements of the customer. The asset management strategy and policy will continue to deliver an increased understanding of the condition of our assets to help define a long term, asset led programme for maintenance and renewal.

Modelling the impact on the network of capital and revenue budget challenges that we will face over the coming years, will be a key requirement. This is, therefore, included as a key deliverable this year. The team will also focus on:

- Sustaining DfT Band 3 status
- Continue focus on Structures and associated Improvement plan
- Roll out the remaining Maintenance Strategies (PRoW, Skid resistance and VRS)
- Complete mobilisation and first year roll out of new asset systems.
- Complete Winter network review
- Respond to the outcome of the Network Rail Crossing Reduction PI
- Continue the ECP project
- Structures Improvement Plan
- Strategic Asset Management Plan
- Bridge Station

INSPECTIONS

Over the next three years, the inspection regime will continue to be developed to support our asset-led decisions. Further opportunities for enhanced data capture will be explored during 2020/21 and includes the rollout of specific inspections of Vehicle Restraint System infrastructure.

Our asset-led approach to inspections delivers revenue maintenance asset condition data that also supports the commissioned capital maintenance programmes.

HIGHWAY INSPECTIONS

The team will continue to be responsible for routine safety inspections for all adopted roads in Essex. 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.

The remote footway network has now been mapped in the asset management system, CONFIRM, which allows better quantifying of the length of network to be inspected.

This makes it possible to review the geographical areas covered by each Inspector with a view to redistributing work across the team to better balance the workloads, improving efficiency.

The data capture of condition associated with this network will help to improve the focus of the capital footway programme. The team will continue to support data capture exercises such as those that inform bids submitted by Essex Highways, on behalf of ECC, to the Department for Transport for dry weather damage.

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

The team will also be involved with Devolution. Each Parish signed up to the pilot will be allocated a named contact to support the prioritisation of local works. While difficult to quantify, it is anticipated that the increase in workloads will be offset by a reduction in enquiries from the Parish Councils involved.

BRIDGES, SUBWAYS & OTHER STRUCTURES

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

There are 1500 structures throughout Essex which are varied in age and complex by nature, comprising 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 replacement of existing structures.

We recognise the importance of continually improving our asset-led approach for Structures and we are embedding our new maintenance policy for these particular assets.

Our ongoing Structures Improvement plan encompasses:

- Forward plan for structures investment
- Future monitoring of Structures Asset Group.

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.

The schemes contained within the capital programme prioritises the structures with the highest risk.

78 improvement schemes were either investigated,

prepared or delivered in 2019-20 from a budget of £9.1m and high value examples of these included;

- Abbotsford Bridge Strengthening, Elsenham
- Alderton Hill, Loughton
- Mundon Wash Bridge, Maldon

We anticipate that 23 improvement schemes will be investigated, prepared or delivered in 2020-21.

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 to ensure that they are capable of supporting the proposed loads.



Mundon Wash Bridge

23
improvement
schemes
planned for
2020-21

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 provides the core 'one-to-many' information-sharing interface between the public of Essex and the Essex Highways service delivery teams. As the contract has matured and ECC has reorganised itself, the highways communications team has picked up core communication activities which other teams in ECC have relinquished or reduced.

Subject matter expertise for response to highways media enquiries now lies largely within the EH Communications team and not elsewhere in ECC. Also, response to pure Highways FOI/EIR enquiries (over 500/year) are entirely managed by the EH Communications team, who provide researched and 'ready to publish' answers to the ECC Your Right To Know team.

The team supports Essex County Council's focus on giving its customers great service and a positive experience. This is a natural 'fit' given that part of the team's remit lies within safeguarding the highways service's reputation. To support this in 2020-21, the team will continue to deliver its key tasks:

- Protect, defend and enhance the reputations of Essex

County Council, Ringway Jacobs and key partners, as expressed through the identity of 'Essex Highways'

- Improve awareness of the positive works/investment we are undertaking on behalf of the County Council
- Provide as much factual, useful highways-related information as is possible, preferably using digital means, to the public specifically including County Members. We seek to improve knowledge of service operation, constraints and successes and will help to minimise inbound customer enquiries elsewhere in ECC, as part of broader cost-saving and customer experience priorities
- 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.
- Manage understanding and awareness of competing and perhaps poorly understood service level expectations against a background of broadly tightening budgets and other pressures. We manage such trade-offs dynamically, with the implied understanding that we are to portray the service in a positive light where we reasonably can, but always in a factually-accurate way.

DEVELOPMENT MANAGEMENT

Managing the outcome of planning applications and associated roads for adoption



Beaulieu Park, Chelmsford

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 Essex County Council.

The Development Management team works with colleagues in strategic development and the planning authority to consider planning applications, ensuring that any new assets are constructed to a standard suitable for adoption and maintainable by Essex County Council. Each adoption means an increase in assets we're responsible for and this is not mirrored by increased budgets. This results in increased risk to the network serviceability and requires careful management.

Development Management has its own regional forum where all our fees are regularly benchmarked, and Essex continues to be the County that is at the cutting edge of working with developers to introduce their development 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 benchmarking and share expertise across the contracts. Key

projects we are working on for the coming year include the implementation of a new graduate programme, investigating the use of drones, Project 13 (an ICE project to improve collaboration in Design), CAD standardisation project and the role of the Principal Contractor in relation to the CDM regulations.

We are presently involved in more than 1054 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 using online interactive software which is targeted at developers providing information and application forms to speed up the process.

The Development Management Team has a key part to play in enabling inclusive economic growth with its work in facilitating development.

The team is working to introduce schemes which promote walking, cycling and passenger transport, which contributes towards helping people get the best start and age well and some of our work on introducing disabled parking bays and pram crossings supports the aim of enabling people to age well.

LOCAL HIGHWAY PANELS

Local Highway Panels (LHPs) meet regularly to deliver small scale improvement schemes

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 Infrastructure.

243
schemes
delivered in
2019/20
Plus 121
designed

More than
155 schemes
to be delivered
in 2020/21
Plus 23 to be
designed



Fambridge

MAJOR PROJECTS

Essex Highways' specialist team is working with Essex County Council to take advantage of the Government's strategy for major investment in highways and wider transport

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

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.

Essex Highways has been very successful in securing external additional funding from South-East Local Enterprise Partnership (SELEP). Winning Bids in Rounds 1, 2 & 3 have provided a significant forward programme for this service to 2022-23. Last year, three HIF (Housing Infrastructure Fund)

Business Cases were submitted and we were successful with two:

- A120-A133 Link Road and Rapid Transit System for £100m
- Chelmsford North East Bypass/ Beaulieu Station for £220m

Following the government budget earlier this year, the third bid (A12 Re-alignment) was announced as successful.

Hertfordshire County Council was successful with the Housing Investment Fund funding bid for Harlow and Gilston Garden Town, which we are supporting.

Focus for this year will be on progressing the development of the HIF schemes to their very tight funding profiles, set by Homes England.

There is also a very high focus on progressing with both short-term and long-term improvements for parts of Chelmsford.

The increased need to achieve more sustainable travel to facilitate future growth in Essex is demonstrated by the removal of the Army & Navy flyover and the aspiration to explore several, innovative, alternative solutions as opposed to replacing it.

The forward programme for Major Projects includes:

- Delivery of the remainder of the SELEP programme in Yrs. 9 – 11,
- Delivery of the M11 J7a junction (2020-2022) and the A127 Fairglen junction improvements (2020 – 2022),
- Delivering the HIF schemes (2020 – 2024).



Improvement works, Wickford Station



PERMIT SCHEME

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



**74064
permits issued
in 2019/20 -
similar number
expected
2020/21**

The Street Works team is responsible for the management and permitting of all road works on the asset and the licencing of skips and scaffolding on the highway, in accordance with the New Roads and Street Works Act (NRSWA).

Through the ECC Permit Scheme, the team works to co-ordinate works to minimise disruption to the travelling public whilst maintaining safety.

The team ensures that works are carried out to the appropriate safety standards, which is measured through low numbers of failed safety inspections and is dependent upon compliance of all works promoters.

In instances where works promoters fail to maintain standards, the team establishes improvement plans, as set down within Streetworks legislation, with the objective of achieving improved performance. The Streetworks team also uses the opportunities made available through enhancements to one.network, to provide information to the public and implement more efficient processes for the organisation. Feedback is regularly given to one.network

which helps to improve the effectiveness and reliability of the system for the organisation.

The Department for Transport (DfT) announced in 2018 the expansion of Lane Rental Schemes producing guidance to help councils develop their own lane rental schemes for approval.

Essex Highways has been investigating the feasibility of operating such a scheme in Essex and the benefits it may offer, however this work has been delayed due to the introduction of Street Manager. This is a new Street Works system, developed by the DfT, to replace the existing Electronic Transfer of Notifications (EToN) system which is no longer aligned with current legislation.

The DfT plans to introduce Street Manager during this financial year and Essex Highways has been involved in the testing of the system, therefore having the ability to influence the outcome. We will continue to work with the DfT to guide on new developments required; embed new functionality as it is released.

PUBLIC RIGHTS OF WAY

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



The team delivers the statutory functions associated with the Public Rights of Way (PRoW) service which provides public access to the Essex countryside and promotes the amenity value of the PRoW network.

The team is currently implementing and embedding the first countywide model of the PRoW network hierarchy. Due to be completed in March 2021, this work is currently subject to continued ongoing refinement and validation. On completion, the PRoW hierarchy will enable a targeted approach across all activities on the PRoW network and will be reflected in the Rights of Way Improvement Plan Review, due for publication in Autumn 2020, and providing the PRoW business case for 2020/21 and beyond.

Updated every 10 years, the Review also captures other initiatives, including the emerging Byway policy and an updated version of the Developer and Public Rights of Way Guide (2010) which will afford greater protection for Public Rights of Way in the development process as well as guidance on new PRoW creation.

Public Path Orders (PPO) 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). The 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 the more PRoW are affected by an order proposal, the greater the cost. Extra plans or orders associated with a PPO scheme will be 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 four 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 AONB) and was extended last year through the Highway Works Devolution project.

The Headland Management scheme is where landowners maintain sections of PRoW on behalf of Essex County Council. The PRoW 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 the PRoW team's remit.

The inspection team ensures that routes are accessible through regular, walked surveys and takes enforcement action when routes have been obstructed inadvertently or otherwise.

ROAD DRAINAGE

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



The highways drainage assets include:

- Gullies - remove surface water from the highway.
- Slotted and gridded drainage channel - more discreet types of gully, removing 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.

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 2-year annual cyclic approach.

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

thousands of “catch pits” and drainage channels and five dedicated crews will complete at least 93,200 gully cleanses in 2020/21.

Cleanse data is captured via Map 16 software and uploaded into Confirm. This lets us use data collected over the last five years on the volume of detritus in each gully when emptied. This means we can analyse and optimise the cleaning frequency for the PR1 and PR2 network, providing resilience and flexibility - cleansing crews are still available to react to flooding incidents.

The management of drainage systems is to be further 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 will be captured along with data

from incidents and inspections to support a more intelligent approach to maintenance.

Surface Water Alleviation Schemes (SWAS) are projects to improve highways drainage systems. This could involve the replacement of pipes or implementing new drainage assets. The asset management team ranks proposed SWAS schemes by risk assessment and 27 high priority SWAS schemes are scheduled to be delivered by a capital funded programme in 2020/21.

The extensive network of watercourses, ditches, form 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.

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 works with Essex Police to manage the data relating to collisions on the road network and uses this, along with enforcement, crime and social economic data, to put activities in place aimed at changing behaviours leading to a reduction in injury collisions.

The key aim is to reduce 'Killed and Serious Injuries' (KSIs) towards the vision of zero injuries. The Road Safety team represents Essex County Council in the Safer Essex Roads Partnership (SERP) and delivers a programme of education, training, enforcement and publicity activities as ECC's contribution to the partnership.

The team also supports the use of safety cameras across the county, working in partnership with Essex Police, Highways England, Thurrock Council and Southend Borough Council, funding the maintenance of the existing cameras and recommending to the Local Highway Panels (LHPs) the installation of additional cameras where there would be casualty reduction benefits.



SERP will be five years old in October 2020. An anniversary event, to be held at Ford's Dunton facility is planned. This will reflect on what has been achieved over the last five years and will be an opportunity to launch the new casualty reduction targets.

The event will also be the catalyst to start wider conversations with stakeholders to transform casualty reduction in Essex and bring about a

step change reduction in deaths and serious injuries on Essex roads. There is a desire this year to work more closely with ECC's Wellbeing and Public Health team, following the latter's 'Risk Avert' intervention. There is a similarity in delivery allowing content to be developed with the progression of child development.

This could bring significant benefits to each pupil and deliver improved outcomes for both teams.

OTHER KEY ROAD SAFETY DELIVERABLES 2020-21

- Organisation and delivery of Bikeability training to over 7000 cyclists using and continuing to develop a new on-line booking and payment system
- Organisation and delivery of 16 SERP community engagement days and 32 "Surround a Town" events
- Delivery of year 5 road safety training in 400 schools
- Delivery of reception walks to parents/children in 100 schools
- Facilitation of delivery of 150 theatre in education performances
- Continuing to explore opportunities for co-location with other bodies as part of SERP
- Ensuring the continuity of the NDORS booking service including the provision of accommodation and systems as necessary.
- Continuing the pilot Driving with Confidence course for older drivers for another year.
- Delivery of an awareness campaign developed by Dorset to target specific high-risk groups.
- Tendering for an agency to produce/deliver an innovative campaign aimed at 17-25 year olds, delivered through the use of influencers.
- Delivery of revised Roadster intervention in line with Risk Avert model.
- Working with partners, including EHAAT (Essex and Herts Air Ambulance Trust) to gain more insight into the most serious injuries to understand how better to prevent them.
- Supporting SERP strategy of 'Unpredictable Visibility' through the provision of combined 'heat maps' directing enforcement and by providing additional speed enforcement through our trained officers.
- Raising awareness of the benefits that the adoption of a Safe System approach across Essex could bring to KSI reduction.
- Raising awareness of the benefits of the Driving for Better Business (DFBB) scheme.

SERP has a reputation as being one of the best examples of its type for partnership working in the country. This is due to its genuine 'one team' approach with each partner, working to the same agreed goals with one budget. The team assists other partnerships and shares information on a regular basis.

The partnership is represented in several regional and national groups thanks to the expertise of its staff and is well placed to influence national processes.

It also delivers services in Kent and at a regional level for Highways England; helping formulate national and regional campaigns and new approaches for training interventions for high risk groups –specifically powered two-wheeler riders.

Additional revenue stream opportunities are regularly explored and the partnership is looking at whether it can deliver Drink Drive courses to offenders.

SERP has practiced the involvement of volunteers in the community to deliver Community Speed Watch in Essex for some time. However, it now has nearly 1000 community volunteers working in 90 groups, showing drivers that speed matters in their local area. This has resulted in 16,000 letters being sent to drivers travelling above the speed limit.

In 2019, for the first time in the country, volunteers were trained and authorised to use speed enforcement devices.

The Extra Eyes campaign encourages people to send in video footage of dangerous and illegal road user behaviour for review by Essex Police. Last year 546 road users were prosecuted for offences as a result.

For 2020-21, Road safety and casualty reduction will be achieved through:

SAFER ROADS AND MOBILITY

SERP aims to raise the inherent safety quality of the roads within the areas it covers for the benefit of all road users. It is proactively encouraging each local authority and/or its delivery partners to adopt the Safer System approach and work to the principles of ISO 39001 - Road Traffic Safety (RTS) Management Systems.

SAFER VEHICLES

Encourage deployment of improved vehicle safety technologies for both active and passive safety. For this, SERP needs to work closely with the DfT and support any campaigns.

SAFER ROAD USERS

Develop intelligence-led, effective programmes to improve road user behaviour with measurable outcomes. Work with other partnerships, authorities and organisations to improve compliance with rules, incentivise positive behaviour changes and equipment choice.

POST-CRASH RESPONSE

Improve post incident responsiveness to minimise the impact on casualties

and the road user. SERP has funded an additional Rapid Response vehicle for the Essex & Herts Air Ambulance Trust (E&HAAT) to provide continuous emergency cover when the helicopter cannot fly.

BIKEABILITY

Bikeability, which trained over 106 adults and 7849 children in 2019-20, promotes safe cycling as a sustainable transport option. This year, we expect approximately 7500 people to gain both skills and confidence on the roads through Bikeability.

SAFETY CAMERAS

Essex Highways staff work in partnership with Essex Police in maintaining the 86 fixed site and two average speed safety cameras that are installed.

SERP aims to use enforcement as a means to engage and educate as it is far more beneficial for a driver to learn from their mistakes and gain a greater awareness for safety on the roads, than simply pay a fine.

NATIONAL DRIVER RETRAINING COURSES (NDORS)

Essex now delivers the most NDORS courses in the country. The target this year is to deliver NDORS courses to 60,000 attendees, not only during office hours but also evenings, weekends and Bank Holidays to meet customer demand.

However, courses have been stopped temporarily because of the Coronavirus emergency and this may affect the programme's numbers.



STREET LIGHTING

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



There are approximately 127,000 lighting columns, 12,000 illuminated signs and 5,600 bollards on the network. We repaired 42,232 faults on streetlights in 2019/20 and a similar number of repairs is expected in 2020-21.

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

Essex County Council budgets 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 have reduced energy consumption and maintenance cost savings over 20 years, due to the lamps having a longer

design life.

LED phase 4 is planned to start in 2020-21 with a planned output of 15,000 lanterns at a cost of £4.6m. The Designs and PCI data has been completed and a tender document was sent out in April for the supply of 85,000 units over a 3.5 year period. The LED replacement programme will commence in Basildon and Chelmsford and will be delivered by two SCP.

The illuminated signs on priority routes will be upgraded to LED along with the lighting in underpasses, which remain a priority.

In 2010 the decision not to install any further illuminated bollards resulted in the replacement of 11,000 non-illuminated units so far, with a further 7,000 still to be changed. The programme aims to replace 480 bollards this year to non-illuminated, prioritising faulty or damaged units.

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 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. 54,500 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 fetes to nationally significant ones such as the Tendring Motor Rally, the planned Velo Essex, and any network management requirements due to Brexit planning.

The ETCC also Provides Network Operations intelligence/insight regarding new schemes on the network and their potential impact/benefit/disbenefit 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 co-ordinated approach is in place for all activities and arranged on the network.

This includes events and road closures.

Approximately 80 events were added in 19/20 including many requiring Temporary Traffic Regulation Orders for closures and other restrictions to be put in place to manage the network. 150 events were communicated to us by local borough/ city/district Councils using T&PCA to close roads for local events.

The volume for year 2020/21 was expected to increase as more new events were planned, but the Coronavirus crisis will have an impact on these.

The team is establishing a process to charge for officer time for advising on, and approving event traffic management for events such as Velo Essex, led by Active Essex and scheduled to take place in September 2020.



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 supporting 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. Work to investigate and agree the way forward after the end of the current partnership agreement in March 2022 is ongoing

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.; support the delivery of the projects identified in the Essex Highways Innovation Plan and the ECC Technology Strategy for Transport.



Duke Street, Chelmsford

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 Essex County Council website.

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 deg 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. During the 2019-20 winter season we investigated the benefits of route-based forecasting. In marginal conditions, this targets those roads or sections of roads that actually need treating. This helps maximise our resources and is much more efficient.

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.





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