Colchester Infrastructure Audit and Delivery Plan

Stage 3 Report

Colchester City Council

24th October 2025

FINAL

Delivering a better world

Quality information

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Table of Contents

Figures

Tables

Abbreviations

Abbreviation	Definition
ACL	Adult Community Learning
ADHD	Attention deficit hyperactivity disorder
AEP	Annual Exceedance Probability
AIMS	Asset Information Management System
ALS	Abstraction Licensing Strategies
AML	Acute Myeloid Leukaemia
AMP	Asset Management Plans
ANGSt	Accessible Natural Greenspace Standards
ANPR	Automated Number Plate Recognition
AOC	Ambulance Operation Centre
AONB	Area of Outstanding Natural Beauty
ARA	Ambrose, Riverside, Ardleigh
ARP	Ambulance Response Post
ASD	Autism Spectrum Disorder
ASRP	Ambulance Service Response Post
BCIS	Building Cost Information Service
BDUK	Building Digital UK
BEVs	Battery Electric Vehicles
BRES	Business Register and Employment Survey
BSIP	Bus Service Improvement Plan
BTEC	Business and Technology Education Council
CAEL	Colchester Amphora Energy Ltd
CAMS	Catchment Abstraction Management Strategies
CBC	Colchester Borough Council
CCC	Colchester City Council
CCL	Climate Change Lower
CCTV	Closed Circuit Television
CCU	Climate Change Upper
CDAs	Critical Drainage Areas
CIL	Community Infrastructure Levy
CIRIA	Construction Industry Research and Information Association
CQC	Care Quality Commission
CRMP	Community Risk Management Plan
CSMHT	Colchester Specialist Mental Health Team
DCMS	Department for Culture, Media and Sport
DCO	Development Consent Order
DfE	Department for Education

Abbreviation	Definition
DfT	Department for Transport
DHSC	Department of Health and Social Care
DMO	Demand Management Options
DNO	Distribution Network Operators
DPD	Development Plan Document
DSU	Day Surgery Unit
DWF	Dry Weather Flow
DWMP	Drainage and Wastewater Management Plans
DYAA	Dry Year Annual Averages
ECC	Essex County Council
ECF	Essex Community Foundation
ECFRS	Essex County Fire and Rescue Service
ECFWS	Essex Child and Family Wellbeing Service
EEAST	East of England Ambulance Service
EfW	Energy from Waste
EHC	Education, Health, and Care
EPMA	Electronic Prescribing and Medicines Administration
EPUT	Essex Partnership University Trust
ESFA	Education and Skills Funding Agency
ESNEFT	East Suffolk and North Essex NHS Foundation Trust
ESOL	English for Speakers of Other Languages
ESP	Employment and Skills Plan
EU	European Union
EV	Electric vehicles
EWP	Essex Waste Partnership
EYEC	Early Years Education and Childcare
EYEC	Early Years Education and Childcare
FAS	Flood Alleviation Scheme
FCRM	Flood and Coastal Risk Management
FCERM GiA	Flood and Coastal Erosion Risk Management Grant in Aid
FE	Forms of Entry
FEEE	Funded Early Education Entitlement
FMfP	Flood Map for Planning
FTTC	Fibre to the Cabinet
FTTH	Fibre to the Home
FTTP	Full Fibre to the Premises
GEML	Great Eastern Main Line
GHG	Greenhouse Gas
GI	Green Infrastructure
GP	General Practitioner

Abbreviation	Definition
GSPs	Grid Supply Points
GVA	Gross Value Added
GWh	Gigawatt-Hour
ha	Hectares
HART	Hazardous Response Team
HIF	Housing Infrastructure Fund
HMCTS	His Majesty's Courts and Tribunals Service
HP	High Pressure
HWCH	Health and Wellbeing Care Hub
IADP	Infrastructure Audit and Delivery Plan
IBSFNA	Indoor and Built Sports Facilities Needs Assessment
ICB	Integrated Care Board
ICS	Integrated Care Service
IDBs	Internal Drainage Boards
IDP	Infrastructure Delivery Plan
IDPFP	Infrastructure Phasing and Funding Plan
IPHW	Institute of Public Health and Wellbeing
IRMP	Integrated Risk Management Plan
ITL	International Territorial Level
km	Kilometre
LACW	Local Authority Collected Waste
LAP	Local Areas for Play
LCWIP	Local Cycling and Walking Infrastructure Plan
LDAs	Learning Disability Assessments
LEA	Local Economic Area
LEAP	Locally Equipped Area for Play
LEVI	Local Electric Vehicle Infrastructure
LFFN	Local Full Fibre Network
LHA	Local Highway Authority
LLFA	Lead Local Flood Risk Authority
LPA	Local Planning Authority
LRN	Local Road Network
LSIP	Local Skills Improvement Plan
LSOA	Lower Level Super Output Area
LTA	Local Transport Authority
LTDS	Long Term Development Statement
LuF	Levelling-up Fund
MandM	Monitor and Manage
Mod App	Modification Application
MRN	Major Road Network

Abbreviation	Definition
MUGA	Multi-use Games Area
NCN	National Cycle Network
NDP	Network Development Plan
NEAP	Neighbourhood Equipped Area for Play
NEE	North East Essex
NEET	Not in Education, Employment or Training
NFM	Natural Flood Management
NGET	National Grid Electricity Transmission
NH	National Highways
NHS	National Health Service
NLHF	National Lottery Heritage Fund
NOR	Number On Roll
NPPF	National Planning Policy Framework
NPT	Neighbourhood Policing Team
NSIP	Nationally Significant Infrastructure Project
NWRSA	New Roads and Street Works Act
ONS	Office for National Statistics
ORCS	On-Street Residential Chargepoint Scheme
PandR	Park and Ride
PACU	Post Anaesthesia Care Unit
PCC	per capita consumption
PCI	Percutaneous Coronary Intervention
PCN	Primary Care Network
PCT	Propensity to Cycle Tool
PFCC	Police Fire and Crime Commissioner
PND	Police National Database
POCU	Post-operative Care Units
PPA	Planning Performance Agreement
PPG	Planning Practice Guidance
PPOSS	Playing Pitch and Outdoor Sports Strategy
PHEVs	Plug-in Hybrid Electric Vehicles
PRoW	Public Right of Way
PSI	Postural Stability Instruction
PVI	Private, Voluntary, and Independent
PVI	Private, Voluntary, and Independent
RAG	Red, Amber and Green
RAMS	Recreational disturbance Avoidance and Mitigation Strategy
RFCC	Regional Flood and Coastal Committee
RICS	Royal Institute of Chartered Surveyors
RIS	Road Investment Strategy

Abbreviation	Definition
RMA	Risk Management Authority
RMT	Rowhedge, Mersea, Tiptree
RoFfSW	Risk of Flooding from Surface Water
RTI	Real-time information
RTS	Rapid Transit System
S106	Section 106
SAB	SuDS Approval Body
SAC	Special Areas of Conservation
SCAP	School Capacity Annual Survey
SEA	Strategic Economic Area
SEND	Special Educational Needs and Disability
SFRA	Strategic Flood Risk Assessment
SMI	Serious Mental Illness
SMPs	Shoreline Management Plans
SNEE	Suffolk and North East Essex
SoP	Standard of Protection
SPA	Special Protection Area
SPD	Supplementary Planning Document
SRN	Strategic Road Network
SRO	Strategic Resource Option
SRTB	Sub-Regional Transport Body
SSH	Supported and Specialised Housing
SSSIs	Sites of Special Scientific Interest
STEPS	Smart Technology and Experimental Plan Suite
SuDS.	Sustainable Drainage Systems
SWAE	Smart Working at Essex
SWMP	Surface Water Management Plan
SWMP	Surface Water Management Plan
TAL	Technically Achievable Limits
TC	Tennis Club
TCBGC	Tendring Colchester Borders Garden Community
TOC	Train Operating Companies
TSO	Transmission System Operator
TWh	Terawatt-Hour
UGF	Urban Greening Factor
UKCP	UK Climate Projections
UKPN	UK Power Networks
USAR	Urban Search and Rescue
VandV	Vision and Validate
VSCE	Voluntary, Community, and Social Enterprise

Abbreviation	Definition
VDSL	Very high-speed digital subscriber line
WAFU	Water Available for Use
WCA	Waste Collection Authorities
WCS	Water Cycle Study
WDA	Waste Disposal Authority
WFD	Water Directive Framework
WPA	Waste Planning Authority
WRC	Water Recycling Centre
WRE	Water Resources East
WRMP	Water Resource Management Plans
WRZ	Water Resource Zones
WSfE	Waste Strategy for Essex
WTS	Waste Transfer Station
WWNP	Working with Natural Processes

Executive Summary

Introduction

The purpose of the Infrastructure Audit and Delivery Plan (IADP) is to identify the infrastructure which is required to meet the growth anticipated in Colchester over the Local Plan period to 2041, along with the associated costs, timing and delivery arrangements for that infrastructure. The IADP will form part of the evidence base to support the Colchester Local Plan review which is currently underway.

The Stage 1 and 2 IADP Report produced by AECOM in mid-late 2024 set out in detail the baseline position for each infrastructure type, and the infrastructure implications of seven high level spatial options being considered by Colchester City Council (CCC). This Stage 3 IADP Report assesses, based on the emerging development trajectory provided by CCC and consultation with infrastructure providers, the demand which planned growth will generate for 37 different infrastructure types, and how infrastructure will be provided to meet this demand to 2041.

The Project Schedule which accompanies the infrastructure assessment and is contained with Appendix A lists all infrastructure projects which have been identified as planned to help cater for demand over the Plan period.

Context and planned growth

The policy framework relevant to population and economic growth in Colchester over the existing and emerging Local Plan periods emphasises the importance of ensuring the appropriate infrastructure is in place to meet the needs of current and future communities. This IADP is therefore set against the context of positively planning for growth in line with the historic achievement of housing delivery targets, and policy aspirations to deliver against future housing needs.

The population of Colchester is growing and ageing. The economic activity rate is slightly below the regional comparison and some pockets of deprivation exist, although these are limited in spatial extent. The economy of Colchester is growing and there are good levels of educational attainment.

For this Stage 3 IADP Report, CCC provided a development trajectory to test the potential infrastructure implications of growth. The trajectory represents a scenario for the potential delivery of housing and employment land in Colchester and is consistent with the Draft Preferred Options Local Plan.

21,053 homes are forecast to come forward between 2025 and 2041, with the second phase (2030/31 to 2035/36) set to deliver the greatest proportion of homes (51%). The emerging development trajectory is made up of 234 housing sites comprising 36 preferred option allocations to be included within the revised Local Plan, 16 existing allocations included within the adopted Local Plan, and 182 existing commitments which already have planning permission. Housing growth will be delivered across different locations within Colchester. A substantial number of homes will be delivered in Marks Tey (2,500), East Colchester (2,300), Tendring Colchester Borders Garden Community (TCBGC) (1,700 units), Langham (910), as well as South Colchester (875).

The development trajectory provided by CCC also identifies existing allocations carried forward from the adopted Local Plan as well new employment sites allocated within the Draft Preferred Options Local Plan. In addition, some committed employment sites which have planning permission and which are safeguarded for employment use within planning policy are identified. All together, 15 employment sites are identified which collectively make up 47.8 ha of development land.

Primary education

There are 64 state funded primary schools in Colchester.

Essex County Council (ECC) tested the growth scenario implied by the emerging development trajectory and found that demand would be generated for 5,741 primary school places, translating into 18.7 Forms of Entry (FE) to 23.5 FE.

The overall impact of the development set out in the scenario on mainstream statutory age education can be mitigated through the allocation of the land for school use and planning obligations (set out the ECC Developers' Guide to Infrastructure Contributions).

There are four sites in Colchester where land has already been allocated for education within the extant Local Plan and s106 agreements. New primary schools will be provided at the TCBGC. In addition, ECC has identified at least three locations where land should be allocated for additional primary schools, and a number of other locations where new or expanded schools will be required.

A high level benchmarking exercise indicates that the cost and funding gap associated with pupils arising from the potential emerging allocations would be £73.0m.

Early Years Education and Childcare

The majority of early years education and childcare (EYEC) provision in Colchester is delivered by the Private, Voluntary, and Independent (PVI) sector, with funded childminders (22%), unfunded childminders (9%), and pre-schools (10 %) forming the majority of the EYEC supply. Overall, in summer 2024 there were 845 vacant EYEC places across Colchester. However, Tiptree, Shrub End, Wivenhoe, St Anne's & St John's, Marks Tey & Layer,Rural North, Greenstead, Prettygate, and Highwoods wards were running at more than 90% occupancy. The waiting list for Colchester EY providers n summer 2025 was just under 16% of the total capacity.

There is a predicted drop in the number of under fives in Colchester over the next two years, however numbers are forecast to increase from 2027. In 2023 the Government announced a programme of Childcare Reforms which has increased eligibility for Funded Early Education Entitlement (FEEE) childcare places to include children from 9 months to statutory school age and the offer is extended to support more working families.

Using ECC's standard early years pupil product factor, it is estimated that there will be demand for an additional 2,297 early years places to 2041 arising from Colchester's development trajectory. Where needs arise, developers will be required to either provide a building (on larger sites) or financial contributions towards EYEC facilities. Where possible, new early years provision will be co-located on school sites although in some instances, standalone provision is preferable.

Using cost benchmarks within the ECC Developers' Guide to Infrastructure Contributions, costs to provide for early years pupils associated with the potential emerging allocations are estimated at £29.2m.

Secondary education

There are 12 state funded secondary schools in Colchester with 13,266 pupils on roll, compared with a capacity of 14,044 secondary school places, suggesting there is a surplus capacity of 778 secondary school places. It is estimated that at 95% capacity, there is a deficit of 76 secondary school places.

ECC tested the growth scenario implied by the emerging development trajectory and found that demand would be generated for between 11.9 FE and 29.2 FE.

The existing allocation at the TCBGC will include its own secondary school provision (either one or two secondary schools). In addition, ECC suggests that land for secondary school provision should be allocated at an alternative location within the Mid (Colchester) planning area (either on a large housing allocation to support a new secondary school or in a location well connected to serve the majority of smaller allocations). Provision could also be expanded at Thurstable School in Tiptree.

A high level benchmarking exercise indicates that the cost of providing for pupils associated with the potential emerging allocations would be £62.6m.

The provision of new secondary schools will primarily be delivered through developer contributions. ECC acts as a commissioner, negotiating and securing funds to establish provision. However, during operation it is likely new schools will be academies and therefore not run by ECC.

Further education

There are three secondary schools with sixth forms in Colchester. Further education is also provided by one college and one sixth form college.

Colchester Institute is the largest further education provider in North Essex and offers both further and higher education opportunities. Three capital projects (expansion of the Energy Skills Centre at the Harwich campus, Sustainable Skills Innovation Centre in the TCBGC, and a Green Energy Skills Centre at the Colchester campus) are being progressed to expand provision for further education and adult learners.

Based on pupils yields within ECC guidance, it is estimated that Colchester's emerging development trajectory would create additional demand for 756 full time further education places to 2041.

Using a high level benchmarking approach, it is estimated that the cost of meeting demand associated with the potential emerging allocations would be £12.9m.

As well as funding from central and local government, developer contributions may be required to contribute towards capital projects. As of April 2025, revenue funding for further education is mainly provided by the Department for Education.

Special Needs education

Demand has outstripped the capacity of SEND service provision in Essex and a greater proportion of high needs students are now in mainstream schools.

There are currently three special schools in Colchester. Colchester is expected to have one of the highest rates of growth in EHC plans issued of all Essex's lower tier authorities. ECC is anticipating that the largest increase will be expected for the secondary and post-16 age groups.

Special needs may be met in a mainstream school, a specially resourced or enhanced provision within a mainstream school or in a special school depending upon the level of need. ECC tested the development scenario set out within the emerging development trajectory, and found that development to 2041 could result in SEN requirements for 201 pupils requiring an EHCP in mainstream schools and a further 124 requiring a special school placement. This demand would be significant enough to warrant new provision within a mainstream school or the expansion of an SEN school within the location.

A high level cost estimate based on cost benchmarks indicates that special needs provision to meet demand associated with the emerging potential allocations would cost £18.6m.

The current SEND capital programme is nearing completion, but there is still unmet demand in Essex. The latest sufficiency assessment has highlighted the need to create a new SEND capital programme, maximise developer contributions, and utilise any future DfE special free school opportunities. ECC are also looking at savings that can be made elsewhere to invest in Essex schools to create more provision.

Higher education

There is one university in the Colchester, the University of Essex. On account of the large catchment areas associated with universities, and the high international student population at the University of Essex, it can be assumed that a large number of students come from outside of Colchester.

The University of Essex plans to increase its intake of students to approximately 20,000 students and 1,000 researchers, as well as establish two new departments or disciplines to meet the University's needs. Despite numbers of domestic and EU undergraduates declining, the University is confident it can expand its operation through partnering with international organisations and promoting postgraduate courses.

Three infrastructure projects for the University have been identified. The largest projects identified include the opening of a new Centre for Coastal Communities as part of the Clacton Civic Quarter Development and the land allocation in the TCBGC DPD for the potential expansion of the Knowledge Gateway, sport facilities, and student accommodation.

The University will be the lead funder of any expansion of facilities to accommodate greater demand.

Adult education

There are two adult education colleges in Colchester: ACL Essex and Colchester Institute.

Adult education colleges have a key focus on basic skills such as Basic English, Maths and ESOL to enable individuals to upskill or enter the workplace. However, adult education provision and the types of courses made available are also shaped by the demand arising from the local economy and community. The TCBGC, Freeports East, and a variety of renewable energy projects in Essex are increasing demand for construction, green, and digital skills.

Population and housing growth is driving the demand for construction skills, as well as modern green and digital skills to adapt a changing sector. To support this growth, it is anticipated that three Colchester Institute Projects will move to Full Business Case (FBC) in early 2025: expansion of the Energy Skills Centre at the Harwich campus, Sustainable Skills Innovation Centre in the TCBGC, and a Green Energy Skills Centre at the Colchester campus. These three projects have combined costs of £11.1 million; at present the funding sources and delivery responsibility for these projects remains to be confirmed.

The Clacton Civic Quarter Redevelopment will include an Adult Learning Centre. This project will be funded by the Levelling Up Fund.

Colchester Institute is currently running at a loss due to challenging external factors, although the deficit has decreased from last year and investments in infrastructure will reduce energy costs in the long-term. The reduction in higher education participation has reduced fee revenue.

Indoor and outdoor sports and leisure facilities

There is a good supply of indoor and outdoor sports and leisure facilities to meet existing demand and likely new demand as the population of Colchester grows. There is, however, unmet demand for swimming pool facilities, and a degree of unmet demand for sports halls in the urban area as well as a need for additional MUGAs to meet informal demand in some locations. More rural, peripheral parts of the local authority area are less well-served and experience gaps in provision.

As outlined in the TCBGC Infrastructure, Delivery, Phasing and Funding document, it is proposed that a Sports and Leisure Park is provided as part of Phase 1 of the TCBGC (between 2025/26 to 2031/32) to serve TCBGC residents and additional needs of the University of Essex. The facility will host a combination of health and fitness and swimming facilities.

The Sports England Active Places Calculator indicates that the new population arising from the potential emerging allocations to 2041 would require 5.70 swimming pool lanes and 7.59 sports courts at a cost of £12.22m. It would also generate demand for 0.95 aritifical grass pitches and 3.79 tennis courts at a cost of £1.56m (noting that this is in addition to the requirement for grass pitches, open space and play space covered in other IADP chapters).

Future facilities are currently assumed to be unfunded. Where significant development is planned, it is expected that developer contributions will be sought to supplement investment from the local authority in indoor and outdoor sports facility provision.

Playing pitches

The Playing Pitch and Outdoor Sports Strategy (PPOSS) identities existing playing pitch provision in Colchester. It finds that the majority of facilities are spatially concentrated in and around the urban area of Colchester, and that the current and future supply/demand balance varies across types of facility and by geography.

The PPOSS describes range of stated ambitions and proposals for expansion or refurbishment of existing facilities, as well as installation of new playing pitches. However there is at present no evidence that these projects are committed or funded. The Strategic Masterplan for the TCBGC proposes that pitch requirements are met across a number of hubs.

Based on Fields in Trust Guidance, the potential emerging allocations could generate demand for 34.1ha grass pitches. Drawing on Sports England benchmarks, the costs of provision are estimated at £5.7m (assumed to be unfunded at this stage). Sport England recommends that developer contributions should be sought in order to supplement investment from the local authority in playing pitch provision.

Open spaces

There are 440 open spaces in Colchester comprising 954 hectares of land use coverage.

There is a good provision of open space in Colchester, particularly in the urban area of Colchester. There is a current deficit of provision when accessibility catchment areas and benchmark space standards are taken into account in the South and West of the local authority area.

In total, 19 allocated sites within the existing Local Plan make provision for open spaces of varying scales. Also, the Playing Pitch and Outdoor Sports Strategy (PPOSS) has identified 23 additional open sites serving catchment gaps that would benefit from enhancements. Costs and funding status for these projects is unknown, though it is likely that funding and delivery would be via the developer.

The TCBGC will create a multi-functional network of primary green spaces and corridors, including creation of the Salary Brook Country Park as part of Phase 1, green corridors to distinguish between the three neighbourhoods, and the provision of sports and leisure facilities.

Applying quantitative standards for provision of different types of open space to projected population increase associated with the potential emerging allocations (28,399 residents), and a benchmark cost, indicates an estimated cost of £19.38 million for open space over the Local Plan period to 2041. This has been recorded in the Project Schedule as a funding gap. However, planning policy requires either on-site provision or financial contribution towards open spaces in order to meet the demands of new residents.

Green infrastructure

Around 26.1% of the Colchester local authority area is considered green infrastructure. A large proportion of this is natural and semi-natural open space (of which the largest contiguous area is Dedham Vale) and also coastal features (particularly at Fingringhoe Wick and Mersea Island). Examples of green infrastructures located in proximity to population centres and providing multiple functions to communities include High Woods Country Park, Abberton Reservoir and surrounds, as well as contiguous green infrastructure between Colchester and Halstead (Braintree).

The provision and enhancement of green infrastructure is promoted by planning policy, guidance and proposals within the Essex Green Infrastructure Strategy and CCC's Green Network and Waterways Guiding Principles.

The current Local Plan sets out an aspiration to complete the Colchester Orbital Route, and going forward access to the Orbital will be enhanced and connectivity improved where possible. These two routes are included within the Project Schedule. Also, many of the allocated sites within the existing Local Plan make provision for contributions of new or enhanced green infrastructure elements; these projects are recorded in the Project Schedule as a single line entry. Costs and funding status are currently unknown.

Demand and costs for green infrastructure associated with potential emerging allocations to 2041 has not been quantified given the overlap with the open space typologies covered within the previous chapter. However, new development is at the forefront of delivering green infrastructure to Colchester. All development should integrate and/or improve green infrastructure given its ability to promote active and sustainable transport, and to integrate green infrastructure principles at early stages of design.

A range of potential funding sources and delivery arrangements exist for green infrastructure including developer contributions, public sector and third sector sources.

Playspace

No shortfalls in quantity have been identified with current playspace provision in Colchester. There are 118 sites totalling 6.21 ha of land; including 11 Local Areas of Play (LAPs), 54 Local Equipped Areas of Play (LEAPs), 15 Neighbourhood Equipped Areas of Play (NEAPs), and 38 casual sites.

Just over half the playspace sites identified in the Open Space Report have been rated above the quality threshold. It was identified that CCC should consider delivering improvements to playspace provision in regard to the maintenance/appearance and/or the quality of equipment on sites.

In terms of accessibility, no significant catchment gap was identified for playspace. Areas with greater population density were identified to generally be within walking distance from play provision.

The existing Local Plan identifies open space requirements on some allocated sites; costs and funding status are currently unknown, but it is likely that the developer would be responsible for funding and delivery.

It is estimated that the additional population associated with the potential emerging allocations will generate demand for 0.85 ha playspace to 2041, with an associated cost of £1.43 million. For the purposes of the Project Schedule, it is assumed that this investment in playspace is currently unfunded.

Youth services

Essex Youth Services and CCC provide youth services in Colchester, including at three dedicated youth facilities, as well as across other non-dedicated venues.

£1.3 million has been secured from the Town Deal programme to upgrade the three youth centres in Colchester. Beyond this, demand for youth facilities will increase to 2041; this has not been modelled as part of this report but it is assumed that at least some of this demand could be accommodated by community centres which are covered within the next chapter.

The local authority may work with a variety of delivery partners to provide youth services.

Local authorities may charge service users, although funding where available should be directed where needs are identified such that barriers to access are overcome, particularly in communities where specific gaps are identified. National funds may represent additional funding sources available to youth organisations and other delivery partners.

Community facilities

CCC maintains an audit of community facilities which identifies 33 church halls, 23 community centres, eight scout huts, 31 village huts, six libraries and 34 other facilities in Colchester. The current Local Plan identifies that while some locations in Colchester have a wide range of community facilities and appear to be well-served, many would benefit from new or enhanced facilities, including Greenstead in the urban area, a number of district centres and some villages.

The Heart of Greenstead scheme is part of Colchester's Town Deal Funding awarded in 2022. It will provide a multi-use community campus including a library and community space.

Developer contributions may be sought to provide additional community space where large new populations are planned, or may be pooled to provide upgrades to existing facilities where smaller population increases are anticipated. Based on benchmarks within CCC’s SPD on Provision of Community Facilities, estimated costs associated with meeting new demand arising from the potential emerging allocations to 2041 are £18.7 million.

ECC/Essex Library Services would only typically seek to build new library facilities where a new population in excess of 7,000 people is expected, and developer contributions would be sought to support this. Contributions towards the expansion of existing facilities or mobile services might

otherwise be sought. Based on benchmarks within the ECC Developers' Guide to Infrastructure Contributions, estimated costs associated with meeting new demand arising from the potential emerging allocations to 2041 are £4.2 million.

It is estimated that new flexible community space totalling 1,800 sqm, to be provided within neighbourhood hubs, will be required as part of the TCBGC.

As well as developer and local authority funding, there are a number of charitable funds/grants which are be available to support grassroots projects including Colchester's community facilities.

Cultural and civic facilities

A wide range of cultural facilities are located in Colchester including heritage assets, art galleries and museums.

£18.2 million was awarded to Colchester in 2022 from the Government's Town Deal of which a proportion will be dedicated to funding cultural projects; £8 million has also recently been awarded to the 'Jumbo water tower' preservation project from the National Lottery Heritage Fund (NLHF).

The Colchester Cultural Strategy sets out an action plan containing a number of other potential projects which will enhance Colchester's cultural assets to 2030, along with respective delivery responsibilities.

CCC may wish to promote the enhancement of existing facilities, particularly where these heritage assets are in situ, or consider the development of new facilities at appropriate provision levels, to support future population growth. Charitable organisations and developer contributions (where related to the development) are potential funding sources to support this.

Employing national benchmarks indicates that the population associated with the emerging potential allocations to 2041 would generate demand for 2,244 sqm floorspace to accommodate expanded arts galleries, archive facilities, and museums.

With regard to civic facilities in Colchester, His Majesty's Courts and Tribunals Service (HMCTS) is responsible for the management of courts nationally, including Colchester Magistrates' Court and Family Court. Cases are dealt with at the appropriate court across local authority boundaries where necessary.

HMCTS plans and manages demand including considering demographic trends and population growth over time to ensure the correct facilities are available in the correct locations. While it reasonable to expect demand for these facilities to increase with population growth, it is not possible to quantify this demand or estimate associated costs.

There are a number of burial grounds in Colchester adjacent to places of worship. In addition, Colchester Cemetery and Crematorium provides cremations to support the needs of Colchester's population.

Demand and costs arising from growth for bereavement services have not been quantified. However, CCC is undertaking a strategic review of the ways in which Colchester Cemetery and Crematorium could be expanded or supplemented with an additional facility.

Police

Essex Police provides policing services across Colchester. The Colchester Local Plan Area is covered by the Colchester District Policing Area. The baseline police resources within the Local Policing Area are operating at capacity.

There is one police station within Colchester, as well as a British Transport Police station.

Essex Police indicates that both the construction and occupation phases of major new housing developments require additional police infrastructure/facilities (police facilities) to provide for the necessary community safety, cohesion, and policing to mitigate and manage the crime impacts arising from the increased population.

Essex Police has identified ten ‘Growth Areas’ within the emerging development trajectory, where sites 250+ dwellings would be located which would require additional or enhanced police facilities such as police floor space, police vehicles, accommodation, traffic management facilities, Police Community Support Officers (PCSOs) during construction, and Neighbourhood Policing Team Teams (NPTs) during operation.

To fund the additional demand on police facilities resulting from the population increase associated with growth, Essex Police will require funding from developers. It is anticipated that the total developer funding requirements for all ten Growth Areas across the plan period will be £5.4 million.

Ambulances

East of England Ambulance Service Trust (EEAST) provides the ambulance service in Colchester. There are currently two ambulance stations comprising the Colchester ‘make-ready’ hub and the Greenstead Ambulance Response Post (ARP). Information received during stakeholder consultation illustrates that demand is high and increasing, and the service is strained by handover delays at hospitals impacting on incurred costs.

EEAST indicated that a new purpose-built new ambulance hub is required in Colchester to meet current demand, which will support ambulance stations and response posts in the vicinity. Ideally, EEAST will also need more ambulance response posts in order to target 90% of the Colchester area in 6-17 minutes. EEAST identify the requirement for four additional ambalances from 2025 to meet demand to 2041. Additional resources would also be required at regional call centres, and for recruitment, equipment and training of Community First Responders.

According to EEAST, building costs of a new hub are in the region of £15m (plus land costs) depending on size and design, plus land costs. No funding is currently committed to the new hub. Each Dual Service Ambulance can cost around £140,000.

EEAST indicated that the potential emerging allocations (12,070 homes) would generate 6,107 additional incidents per annum and that developer contributions of £4.1 million would be required accordingly.

EEAST will apply to NHS England for funding for the new ambulance hub but anticipate that S106/CIL will provide additional funding. Developer contributions will also potentially support establishment of new ambulance response posts, provision of additional ambulances and recruitment / equipment / training of Community First Responders.

Fire and rescue

Essex County Fire and Rescue Service (ECFRS) provides fire and rescue services across Colchester. Within the local authority area, there are five key assets: one wholetime station, three on-call stations, and one Urban Search and Rescue hub. ECFRS state that baseline resources are currently operating at capacity in Colchester.

ECFRS highlight that new housing supply from ten ‘Growth Areas’, comprised of existing allocations or preferred emerging potential allocations which will deliver 250 dwellings or more, is likely to give rise to significant additional resource needs for ECFRS. Additional demand will arise through an increase in the Prevention, Protection, and Response activities, including the increased number of incidents, increased attendance times and changes in the incident risk profile to be mitigated and managed.

Additional or enhanced support may be in various forms including additional or enhanced fire station floor space and facilities; fire service plant and equipment; fire and rescue vehicles; and funding for the recruitment, training, equipping and tasking of additional staff.

ECFRS estimate that developer funding of £2.9 million is required to meet requirements of growth to 2041. The calculations are to be supplemented by a more detailed evidence base as part of the forthcoming Local Plan Regulation 18 consultation.

Primary care

The Suffolk and North East Essex (SNEE) Integrated Care Board (ICB) is responsible for the commissioning of primary care services in Colchester including GPs, dental services, community services and some specialised hospital services.

There are eight PCNs operating 35 medical practices in Colchester. As of December 2023, all medical practices are operating above capacity, based on the 1:1,800 national standard (1 FTE GP to 1,800 patients).

Demand for primary care is set to increase due to population growth, the aging of the population, the increasing prevalence of multimorbidity, and ongoing cost of living challenges. Challenges include the number of primary care vacancies (specifically GP, nursing and pharmacy roles) and the scale and nature of the estate required to meet current and future forecast care needs.

To ensure a joined-up neighbourhood health and care team model, in line with the 10 Year Health Plan (July 2025) it is necessary for the ICB to have an agreed ‘core’ estate where multiple support services can come together to provide a ‘single front door’ for communities, ensuring easier access and support working towards enabling multidisciplinary teams to operate at least 12 hrs a day and 6 days a week. In NE Essex, the core estate is identified as including the Turner Road Primary Care Centre in Colchester and the Heart of Greenstead community and wellbeing campus in Colchester.

Capital schemes already in the pipeline include the Greenstead Community Hub (which will include a new GP surgery and pharmacy). SNEE ICB is also working on a delivery strategy for healthcare facilities as part of the TCBGC.

SNEE ICB identified a further nine capital projects to help accommodate demand for new primary healthcare facilities to 2041.

A high-level benchmarking exercise indicates that the cost of providing primary care, acute care services, and mental health services associated with the potential emerging allocations would be £52.3 million.

Acute care

East Suffolk and North Essex NHS Foundation Trust (ESNEFT) (a merger of the previous Colchester Hospital University NHS Foundation Trust and Ipswich Hospital NHS Trust) is responsible for the provision of hospital and community health care services across Colchester. The current lead commissioning group is the SNEE ICB. ESNEFT partner with North East Essex (NEE) Community Services to provide community care and nursing for housebound patients in Colchester, and with Hertfordshire Partnership University NHS Foundation Trust provide talking therapies and learning disability services in North Essex.

Acute care facilities within the local authority area comprise Colchester Hospital and Oaks Hospital. Community care provision by ESNEFT and partners in Colchester is delivered at Lexden Hospital as well as within smaller centres, care homes and patients’ homes.

The SNEE ICS describe existing capacity challenges across a number of service areas including in-patient beds and diagnostics.

There are six acute healthcare schemes in the Project Schedule. The Endoscopy Unit at Colchester Hospital is estimated to cost £16 million and is assumed to be funded as it will open in 2025. Costing information for other planned schemes at Colchester Hospital, including the electrical infrastructure upgrade and the Day Surgery Unit, are not yet available. The overall funding gap is therefore unknown at this time.

A high-level benchmarking exercise indicates that the cost of providing primary care, acute care services, and mental health services associated with the potential emerging allocations would be £52.3 million.

Mental health services

Mental health services in Colchester are delivered by the Essex Partnership University Trust (EPUT). The NHS also comissions mental health services from the voluntary and private sector. A range of services is delivered including the Specialist Mental Health Team, Acute Adult Inpatient Services at Colchester Hospital, and the Children's Learning Disability Service.

EPUT's Strategic Plan (2023-28) states that mental health services are encountering challenges relating to increased demand for EPUT's services, driven by Colchester's ageing population twinned with increased mental health referrals for children and young people; an increase in the number of those challenged by the cost-of-living crisis and the aftermath of the Covid-19 pandemic; and significant workforce pressures.

A high-level benchmarking excerise indicates that the cost of providing primary care, acute care services, and mental health services associated with the potential emerging allocations would be £52.3m.

Adult Social Care

In total, there are 48 care homes within Colchester, of which 35 operate within the built-up city area.

ECC co-ordinates and commissions provision of Adult Social Services, including domiciliary care services (which includes a range of services to support an adult to remain in their home) and working aged residential care (a service that supports an adult with learning disabilities and/or autism and physical and sensory impairments on a long-term basis).

Population increase to 2041 can be expected to increase demand for Adult Social Care, especially given that the proportion of older people in Colchester is growing. A high level benchmarking excerise indicates that the projected population for over 75s arising from potential emerging allocations is 2,816 and it is anticipated that 127 additional nursing homes places, 183 residential care places, and 70 additional extra care places will be required. The associated cost would be £56.8 million.

Care homes and other facilities are largely provided through private and third sector providers, although health and social care services can be provided at community facilities operated by the NHS or local authorities.

Where there is evidence of need and where feasible within masterplans, ECC's preference is for large-scale development to deliver a proportionate provision of Specialist and Supported Housing (SSH) for predicted care and support needs arising. ECC will liaise with Local Planning Authorities to consider how opportunities for SSH can be realised on sites with significant housing development. Where this new accommodation cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

Specialist and supported facilities for children

ECC has a statutory duty under child protection law to meet children and young people's care needs and the needs of looked after children.

ECC has commissioned the Essex Child and Family Wellbeing Service (ECFWS), which operates 'family hubs', to deliver services from a number of sites. ECC also provides childrens services including supported accommodation, registered children's homes, home-based care for children with disabilities, overnight short breaks for families and children, and short break community clubs and activities. Demand for these services is high. Children's Services and Early Years currently account for 14.6% of ECC's total expenditure on services (£367.1m, approximately £976,000 per day).

Population growth will lead to an increase in the number of children aged 0 to 25 living in Colchester and therefore in the demand for children's services. This implies a likely need for additional space within family centres or alternative community hubs. It is also likely that population growth will lead to an increased requirement for children's accommodation in terms of both supported housing and registered childrens homes. The ECC Developers Guide indicates that where there is evidence of need, ECC's preference is for large-scale development to deliver a proportionate provision of Specialist and Supported Housing (SSH) for predicted care and support needs arising. Where this

accommodation cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

A high level benchmarking excerise indicates that there will be a demand for 219 children social care beds up to 2041 associated with the potential emerging allocations, with a cost £45.1 million.

ECC's expenditure on children's services is funded through council tax, business rates and government grants. SNEE ICB and the Start Well Domain have provided grants to local projects, to help deliver emotional wellbeing and mental health early support in Colchester between 2023-25.

Active travel

There is some existing cycling infrastructure in Colchester city centre, but limited provision in more rural areas. Given this higher level of provision and the fact that it is a major employment centre, the most significant cycling levels are seen in Colchester urban area.

Rural provision of active travel infrastructure largely consists of NCN and leisure walking routes.

Although improving, there is limited provision of cycling infrastructure at transport interchanges.

There is planned strategic investment in the city's active travel infrastructure put forward in the recently published LCWIP. These LCWIP routes are key to the Local Plan growth mitigation package.

A network of mobility hubs across Colchester are another key component of the mitigation package.

The Project Schedule currently records overall estimated cost of £265.6 million for 84 active travel schemes under the High Sustainability Scenario, and a funding gap of £254.8 million.

Bus services

Bus services in Colchester are limited outside peak hours, and supporting infrastructure is often poorly maintained. These challenges are common in small cities surrounded by rural settlements, as is the case in Colchester. Service provision is notably poorer in the more rural areas of the borough.

Park and Ride has proven successful in Colchester and its expansion has been proposed to increase capacity and offer greater modal choice for users.

The Rapid Transit System (RTS) is a new public transport service committed to Colchester. This scheme will provide priority services connecting the city centre to the south-east and will support the TCBGC development.

The provision of bus services is largely determined by local demand. Where growth creates sufficient demand to support a commercially viable service, it is likely that such services will be introduced.

Additional details on bus infrastructure requirements are dependent on the outcomes of forecast modelling and the associated mitigation measures proposed to address its findings.

To support growth to 2041, an extension of the RTS is proposed from the City Centre to Marks Tey.

Further proposed measures include upgrades to the Bus Station in Colchester and the delivery of a further Park and Choose site on the A120.

The Project Schedule records 18 schemes and overall estimated costs of £67.0 million for bus schemes in the 'High Sustainability' scenario, and a funding gap of £67.0 million.

Rail services

Colchester is a strategically important location in the East Anglian rail network. Colchester Station is located on the Great Eastern Main Line (GEML), with frequent services to London and other key regional destinations.

Significant rail freight flows through and nearby to Colchester. Freight is central to rail policy and planning in the region.

No significant rail schemes have been planned or committed in Colchester. Research is ongoing to understand the current and future capacity needs of the GEML.

Roads

Colchester is a strategically important location in the Strategic Road Network (SRN). The A12 and A120 transect the local authority area.

The SRN has significant issues on both the A12 and the A120. Issues on the A120 are severe and unsustainable. Capacity issues at junctions are interconnected and require holistic solutions.

There are significant delays on multiple local roads in the city centre and safety concerns at junctions across Colchester.

The proposed measures in the Local Plan growth mitigation package are proportional to the impact of that growth. The largest individual measure by cost is widening of the A12 Junction 29 slip.

All together, the Project Schedule identifies 27 highways schemes with estimated costs of £188.0m and a funding gap of £52.1m.

National Highways will assess planning proposals on a case-by-case basis. They support the principle of a Monitor and Manage approach to development, emphasising the need to monitor the impacts of growth and implement appropriate mitigation within a suitable timeframe to address issues effectively.

Electric vehicle charging

The EV charging infrastructure in Colchester is currently expanding from a low baseline. Provision of public charging devices in the East of England is significantly lower than the national number per head of population.

Future demand is likely to increase very significantly as the government has implemented ambitious targets on the roll out of EV infrastructure and phasing out of petrol and diesel cars.

The expansion of EV infrastructure is heavily dependent on both government and private sector funding, including developers (S106 and/or S278).

The delivery of new charge points and ensuring these charge points are at strategically located multi-modal interchanges is a key priority for investment. Information on scheme costs, funding secured and delivery for mobility hubs at 17 locations across Colchester are set out in the Project Schedule.

Electricity

UK Power Networks (UKPN) operate fifteen primary substations in the Colchester Borough. Currently, all but one primary substation have more than 5% demand headroom availability.

The forecasted electricity demand for 2041, based on the emerging housing and employment projections, indicate that all but four primary substations will have capacity to accommodate the anticipated increase in electricity demand. However, this assessment is less conservative (i.e. more optimistic) than the Long Term Scenario Forecasts that were performed by UKPN and presented in the Stage 1 and 2 report.

The primary substation areas predicted to have insufficient capacity to accommodate the anticipated increase in electricity demand are located at the eastern and western extents of Colchester, in rural areas.

No planned UKPN projects have been identified to increase capacity of the electrical infrastructure in Colchester.

In accordance with DNO licence conditions, UKPN do not proactively invest in their network ahead of need. Instead, they reinforce their networks as required to suit committed developments, typically using funds provided by developers in paying connection fees.

A high-level benchmarking exercise indicates that the cost of delivering electricity demands associated with the potential emerging allocations would be approximately £251.8 million. It is assumed that this cost will be met by the utility company and by developers through connecton fees as noted above.

Gas

Cadent Gas did not share the exact capacity or location of their infrastructure but provided assurance that there are no potential bottlenecks in their networks for future expansion in Colchester.

The gas demand associated with employment allocations is presented in Table 5.3. This estimate (169.6 MWhr/day) is considered to be conservative as it does not account for the electrification of heating in commercial development.

In general, UK demand for gas is anticipated to decline to 2041 due to government legislation.

If a new connection to the system triggers a requirement for Cadent Gas to reinforce their network, an economic test is performed to calculate the level of customer contribution, if required at all.

Renewable energy

Renewable energy projects in Colchester currently generate 81.9 MW through Solar PV and 6.6 MW through landfill gas to energy sites.

By 2041, known renewable energy projects that have been granted planning permission in Colchester could increase renewable energy generation to 171.5 MW through solar PV, 6.6 MW through landfill gas to energy and 6.4 MW through battery energy storage.

Renewable energy projects are typically funded and delivered by private developers.

Telecommunications and digital

The timescales envisaged for the updated Local Plan to 2041 are likely to see full-fibre connectivity emerge as a ubiquitous utility infrastructure, with densification of existing fibre networks and the retirement of the legacy copper networks originally designed and deployed for telephony.

There remains ample scope for public-private partnerships in helping to deliver full-fibre connectivity, and Colchester is well-placed to make best use of the network assets already delivered since 2020 in this way.

While the process of full-fibre network build will remain commercially driven, CCC has the opportunity to shape the process to the benefit of residents and businesses alike. This may include an explicit requirement that all new builds should be able to offer full fibre from multiple providers, ideally using open-access infrastructure.

At the same time, it is highly desirable that a “dig once” approach is taken to utility infrastructure. Implementing this goes beyond the remit of the Local Plan however, and would require changes to the wider legislative framework, notably the New Roads and Street Works Act (NWRSA 1991).

The Project Schedule includes one digital infrastructure project, the rollout of Ultrafast Broadband to 25,000 premises, a collaboration between VX Fiber and Colchester Fibre which is currently underway and assumed to be funded.

Potable water

Anglia Water (AW) is the main potable water supplier to Colchester with small areas around Dedham and Wivenhoe provided by Affinity Water.

Colchester is supplied by the AW Essex South Water Resoure Zone (WRZ) and Affinity Water’s Brett WRZ which are classed as under serious water stress by the Environment Agency.

The main issues affecting the WRZs' supply-demand balance are population growth and restoring sustainable abstraction. The AW Essex South WRZ is expected to go in to supply deficit by 2025 if no measures are put in place. The Brett WRZ would still operate a surplus in its supply and demand balance until 2040 even without additional measures.

AW plans to overcome the predicted deficit mainly through a demand management strategy as well as new supply options including imports from outside the WRZ, water re-use at Colchester Water Recycling Centre (WRC) and, depending on the scale of future environmental needs, potential desalination. The preferred demand management strategy includes a smart metering programme, leakage reductions and water efficiency measures.

AW are funding overall improvements to their strategic supply networks and making efforts to reduce water consumption.

There are three demand management potable water projects in the Project Schedule. The Project Schedule also contains four supply projects. Total capital costs of the listed projects are £5,146.9m, however it is noted that these projects will cater for demand not just from Colchester but for a wider geographical area, and for this reason the costs have not been included in the grand total presented in chapter 6. The projects will be funded by AW through their Price Review (PR24) and so there are no funding gaps.

Owing to the connectivity of WRZs, the spatial location of growth within Colchester does not materially influence investment required in water resource management.

Developers are to fund the cost of development connections. A high-level benchmarking exercise indicates that the cost of connection charges to provide potable water infrastructure with the potential emerging allocations would be £10.5 million. This sum has been included in the Project Schedule.

Wastewater

There are 18 Wastewater Recycling Centres (WRCs) across Colchester which treat wastewater from domestic and non-domestic uses, with three of these WRC catchments located partly in adjacent local authority areas or catchments. 13 of these WRC would have allocated sites within their drainage catchments.

It is expected that the demand for wastewater services within these 13 WRCs will increase due to population growth as well as climate change leading to more foul and surface water entering the network.

Through their statutory Drainage and Wastewater Management Plan (DWMP) process, and prior to the identification of preferred site allocations for the emerging Local Plan, AW risk-assessed their WRCs and their catchments. AW identified three WRC catchments within Colchester as "At Risk" by 2050 and a further six WRCs with some headroom available for proposed future growth which may require phasing to allow for future planned investment to come forward.

The parallel Water Cycle Study (WCS) for Colchester has additionally assessed the impact of the preferred site allocations against WRC capacity to compare against the assumptions of AW's DWMP. The summary of the outcomes for each of the 13 WRCs with allocations in their catchment is shown in Table E-1 below.

Table E-1: Wastewater Recycling Centres Capacity to 2041

WRC	Is there capacity for all growth to 2041?	Commentary
Birch	Yes	No infrastructure change requirements
Colchester	No – capacity would be exceeded from 2031	Insufficient capacity for all growth – a solution to protect water quality is possible, but exact solution is not yet identified or planned - funding not yet secured.
Copford	No – capacity would be exceeded from 2033	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned before 2030 with long term strategy set out. Short term funding confirmed, but longer term funding to be secured.
Dedham	No - no current capacity (before growth)	No current capacity – a solution to protect water quality is possible but is not planned until 2035. However, growth numbers are small and potentially

WRC	Is there capacity for all growth to 2041?	Commentary
		acceptable with a minor change in discharge permit. There may be early phasing implications. Funding not yet secured.
Earls Colne	No – capacity would be exceeded from 2040	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned before 2030 with long term strategy set out. Short term funding confirmed, but longer term funding to be secured.
Eight Ash Green	No – capacity would be exceeded from 2038	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned in the medium term and long term within the DWMP but funding to be agreed for medium to longer term strategy.
Fingringhoe	No - no current capacity (before growth)	No baseline capacity, a solution to protect water quality is possible and investment works are planned before 2030 (current AMP) – there may be early phasing implications. Early funding required is secured.
Great Tey	No – capacity would be exceeded from 2035	Insufficient capacity for all growth – a solution to protect water quality is possible, but exact solution is not yet identified or planned. No funding identified.
Langham	No - no current capacity (before growth)	No current capacity – a solution to protect water quality is possible but there are no plans to improve the WRC in the current AMP or longer term DWMP strategy. There will be phasing implications and no funding is secured.
Layer de-la-Haye	Yes	No infrastructure change requirements
Tiptree	No – capacity would be exceeded from 2038	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned (but funding not yet secured) in the long term within the DWMP
West Bergholt	No - no current capacity (before growth)	No current capacity – a solution to protect water quality is possible but is not planned until 2035. There may be early phasing implications. Funding needs to be confirmed.
West Mersea	Yes	No infrastructure change requirements

The WRCs with either current funded projects i.e. AMP8 (before 2030), or medium to longer term DWMP solutions needed (post 2030, but not yet funded) are listed as projects within the Project Schedule in Appendix A.

Across their company area, AW plan to invest £5 billion between 2025-2050 to mitigate future risks to the wastewater network from expected growth and climate change. Of this, £836 million is estimated to be invested in wastewater infrastructure solutions within the Essex Rivers Catchment Partnership in which Colchester local authority area is located. This gives an indication of the scale of investment that will be required in Colchester and surrounding local authority areas. However, only funding to 2030 is currently confirmed by Ofwat in the current AMP8.

For improvements at the identified WRCs in the AMP8 Business Plan (Earls Colne, Copford and Fingringhoe), AW are investing approximately £11.97 million between 2024 to 2030. This AMP8 funding will come before 2030. This is reflected in in the Project Schedule.

Costs associated with connecting new developments to the network are charged to the developer. A high-level benchmarking exercised indicates that the cost of providing wastewater infrastructure with the potential emerging allocations would be £8.4 million. These costs are also included in the Project Schedule.

Flood defence

The primary sources of flood risk in the Colchester local authority area are tidal, fluvial and surface water, associated with the River Colne, River Stour and their tributaries.

Flood defences are primarily located along the River Colne, as well as the coastal frontage and Mersea Island. These mainly comprise natural high ground, embankments and the Colne Barrier. The condition and level of protection provided by the flood defences is variable and climate change is likely to reduce the effectiveness of the defences in the long term in the absence of works to maintain the level of protection.

Areas most likely to be affected by fluvial impacts of climate change are southern areas of the local authority area due to the areas' low lying topography; and areas close to the Colne and Stour Rivers.

There are currently no flood risk management schemes proposed within Colchester.

Where housing and employment development sites are proposed within the City of Colchester (noting that at this stage the emerging development trajectory identifies existing employment allocations only), some sites intersect slightly with Flood Zones 2 and 3.

The Colchester Local Plan 2017-2033 requires all development to be directed to areas at lowest risk of flooding by applying the Sequential Test, in line with national guidance. Where future developments within Flood Zone 2 and 3 are proposed, they may require improvements to flood defences to provide or maintain a 1 in 100 year SoP and to pass the NPPF Exception Test. However, this would need to be considered on a case by case basis and it would need to be demonstrated on a catchment level that flood risk is not increased downstream, through the loss of floodplain storage or floodplain connectivity.

Proposed development located in areas to the south on lower lying land and settlements in proximity to the Rivers Colne and Stour, together with their tributaries in particular may require improvements to defences to ensure adequate protection for the proposed developments. This may add significant additional expense for developers. Liaison with the Environment Agency will be required to determine any site-specific requirements with regards to Flood Defences.

Surface water management

Surface water is one of the main sources of flooding across the Colchester local authority area. Several communities are at risk of flooding from this source. The areas of Colchester located within the Critical Drainage Areas (CDAs) and within Marks Tey have a high prevalence of reported surface water flooding events in particular.

Strategic scale Sustainable Drainage Solutions (SuDS) may form part of flood alleviation projects to reduce the impacts and frequency of existing surface water flooding problems. Anglian Water's DWMP includes long-term strategies to increase drainage capacity through surface water management and upsizing, and via emerging schemes in catchments susceptible to emerging growth.

SuDS for new major development will also be essential to ensure that surface water discharge rates and volumes from growth are kept to a minimum or as close to the pre-development runoff rate as possible, minimising the increase in flood risk downstream, particularly along the River Colne and River Stour. While no schemes relating to SUDS have been identified within the Project Schedule, it is likely that all the development sites referred to in the emerging development trajectory are of sufficient size to require SuDS provision under the NPPF, though smaller sites may pose feasibility challenges to including provision within the development boundary.

SuDS must be designed and constructed in consultation with ECC in their role as Local Lead Flood Risk Authority (LLFA). The impacts of climate change must be considered in the design of SuDS schemes.

Funding for SuDS related to growth will be provided by developers, and in some cases where SuDS can form part of a wider solution to manage existing surface water flood risk, these may be part funded by the LLFA, the Environment Agency or water companies on a site by site or project by project basis. Under the current legislative and policy position, SuDS constructed for new development will be maintained by private owners or in some cases, may be adopted by Anglian Water, or ECC. Once Schedule 3 of the Flood and Water Management Act is enacted a SuDS Approval Board (SAB) will adopt SuDS built to the requirements of new national SuDS standards.

Anglian Water's DWMP identifies significant investment in surface water management to manage WRC treatment and transmission capacity; however, SuDS specific schemes within Colchester are not identified at this stage of planning, and no costs have been allocated to surface water management within the Project Schedule.

Liaison with the LLFA and EA will be required to determine site-specific requirements prior to SuDS construction and development.

Waste and resource management

ECC is both the Waste Disposal Authority (WDA) and Waste Planning Authority (WPA) for Colchester. Household and commercial waste is collected by the Waste Collection Authorities (WCA), such as CCC.

Waste management facilities are currently operating at or near capacity throughout Colchester. ECC is currently exploring options for site expansion and/or reconfiguration at its waste transfer station (Ardleigh off the A120) and its waste recycling centres (Shrub End, West Mersea, Witham and Clacton). The adopted Waste Local Plan (2017-2032) has allocated two sites in Colchester (Bellhouse and Fingringhoe) for waste infrastructure and has earmarked potential 'areas of search' where waste infrastructure may be suitable in principle.

Costs are not known for the eight projects identified in the Project Schedule. Requirements for LACW waste and resource management infrastructure is funded through the council taxpayer, and ECC may also seek developer contributions on a case by case basis. Delivery responsibility for projects identified above sits with CCC and ECC alongside private delivery partners.

ECC notes that both regulatory and macro-economic changes and changing individuals' behaviours may have implications for waste management infrastructure demands over the Plan period. ECC anticipate that waste generation per household will likely increase over the next five-to-six years as the economy improves, however regulatory changes may lead to less waste being collected by local councils and more going via alternate routes such as mandated take-back schemes operated by businesses.

Key findings

The Project Schedule (Appendix A) identifies 230 infrastructure projects which will help meet needs arising from development in Colchester to 2041. A number of line-items in the Project Schedule relate to the modelled estimates of demand and costs for social infrastructure.

Total costs of £1,317 million and funding of £506 million have been identified. This implies a funding gap of £811 million. Transport projects account for 40% of the costs identified and 46% of the funding gap. Social and green infrastructure projects account for 35% of the costs identified and 54% of the funding gap. Hard infrastructure accounts for 25% of the costs identified and 0% of the funding gap.

The majority of the infrastructure projects for which a broad delivery date has been identified are set to come forward within the next 10 years.

The line items with the highest cost in the Project Schedule (excluding schemes which are located entirely or partly outside of Colchester albeit they will cater partly for Colchester's need) are: electricity substation upgrades in 15 locations to meet new demand (£251.8 million, assumed to be funded); a new strategic link road between the A120 and A133 (£86.0 million, assumed to be funded); primary school provision to 2041 (high level benchmark estimate of demand and cost) (£70.4 million, assumed to be unfunded); and secondary school provision to 2041 (high level benchmark estimate of demand and cost) (£61.1 million, assumed to be unfunded).

This IADP demonstrates that work is well underway by CCC, service providers and partners to identity and deliver the future infrastructure required for development over the Plan period. The IADP has formed a basis for conversations about how future growth in Colchester can be delivered. Going forward, as a comprehensive assessment of infrastructure and projects needed to support growth, the IADP can provide a tool for future partnership working and co-ordination in the planning and delivery of services.

CCC has engaged with neighbouring Local Planning Authorities (LPAs) as part of the process for formulating the new Local Plan to 2041. CCC is also engaged with sub-regional partners through the North Essex Economic Board (NEEB). Essex County Council, Southend City Council and Thurrock Council were accepted onto the government's Devolution Priority Programme in February 2025. This is likely to result in the creation of a Strategic Authority for Greater Essex, which will initially take the form of a combined county authority. It has been proposed that Colchester, Braintree, and Tendring councils could form a North East Essex unitary authority by 2028. However, this proposal is at early stages and is reliant on Local government reorganisation going ahead.

Most infrastructure receives all or a major part of their funding from national government, whether that comes through ECC, CCC or via a central government agency. Funding also comes from the charitable sector and the private sector, in the form of private equity and financial or in-kind contributions from developers.

There is potential for many items on Colchester's IADP Project Schedule to be funded by developers. In 2023/24 CCC reports that £2.95 million was received from planning obligations, and a total of £1.63m was spent.

In addition to mainstream funding sources and developer contributions described above, other funding sources potentially available to fund infrastructure in Colchester include one -off public sector grants (e.g. the Neighbourhood Planning Grant, the Towns Fund, the Long Term Plan for Towns and the Future High Streets Fund), the new homes bonus, the UK Shared Prosperity Fund, business rates retention, Stamp Duty Land Tax (SDLT) supplement, parking revenue, Public Works Loan Board (PWLB) and a tourist tax.

The funding landscape is dynamic. As a next step, CCC and partners may need to prioritise projects (or clusters or portfolios of projects) and to explore further which specific combination of funding sources is likely to be most appropriate in each instance. Through continued joint-working, CCC and partners will be in a strong position to respond promptly and effectively to infrastructure funding opportunities, and to attract investment.

1. Introduction

1.1. Objectives of the IADP

1.1.1. The purpose of the Infrastructure Audit and Delivery Plan (IADP) is to identify the infrastructure which is required to meet the growth anticipated in Colchester over the Local Plan period to 2041, along with the associated costs, timing and delivery arrangements for that infrastructure. The IADP will form part of the evidence base to support the Colchester Local Plan review which is currently underway.

1.1.2. The Stage 1 and 2 IADP Report produced by AECOM in mid-late 2024 set out in detail the baseline position for each infrastructure type. It also reviewed the high level options consulted on by Colchester City Council (CCC)[1] as part of the Local Plan Issues and Options stage, in order to identify infrastructure implications of those options and thus inform CCC's work to select a preferred option for the Regulation 18 Draft Local Plan.

1.1.3. This Stage 3 IADP Report assesses, based on the emerging development trajectory provided by CCC, the demand which planned growth will generate for each infrastructure type, and how infrastructure will be provided to meet this demand to 2041. The development trajectory represents a scenario for the potential delivery of housing and employment land in Colchester. The first iteration of this Stage 3 Report, produced in early 2025, was based on the emerging development trajectory as at November 2024. This second iteration of the Stage 3 report is based on the sites identified within the Draft Preferred Options Local Plan[2].

1.1.4. The Project Schedule which accompanies the infrastructure assessment and is contained with Appendix A lists all infrastructure projects which have been identified through stakeholder consultation and documentation as planned to cater for demand over the Plan period, including where known costs, funding and delivery arrangements.

1.2. Scope and approach

1.2.1. The scope and approach of the IADP reflects national planning policy and guidance, best practice in infrastructure planning and discussion with CCC officers. The infrastructure types addressed, as shown in Table 1-1, include services serving a local catchment as well as those which are more strategic in nature.

Table 1-1 Scope of IADP by infrastructure type

Infrastructure type	Sub-category
Transport	Roads
	Active travel
	Public transport (rail, bus)
	Electric vehicle infrastructure
Utilities and water	Electricity and gas
	Renewable power
	Telecoms and digital
	Flood defence
	Flood alleviation/surface water management
	Wastewater
	Potable water

[1] Throughout the report, 'Colchester' is used to describe the entire local authority area unless otherwise stated. Colchester Borough Council is now known as Colchester City Council (CCC); referencing throughout the report refers to the applicable local authority name at the time of publication of documents.
[2] Available at: Document.ashx

Infrastructure type	Sub-category
	Waste management
	Recycling and circular economy
Social and green infrastructure	Early years and childcare
	Primary education
	Secondary education
	Further education (sixth form and post-16)
	Special Educational Needs and Disability (SEND)
	Higher education
	Adult education
	Primary healthcare (GPs)
	Acute healthcare
	Community health services
	Social care (adult, specialist, and supported services for children)
	Indoor and outdoor sport and leisure facilities
	Playing pitches
	Open spaces
	Green infrastructure
	Play space
	Youth facilities
	Community facilities (meeting places, community spaces, youth centres, libraries, places of worship)
	Arts, culture and civic facilities
	Police
	Ambulance
	Fire and rescue

1.2.2. The preparation of this IADP Stage 3 Report has involved the following tasks:

- A review of CCC's emerging development trajectory;
- Stakeholder consultation, building on that undertaken at Stage 1 and 2; and
- An assessment of future infrastructure needs drawing on the technical expertise and experience of AECOM team members and reflecting feedback from stakeholders.

1.2.3. The Regulation 18 Draft Local Plan is expected to be published for consultation in December 2025. Once representations and feedback on the Draft Local Plan have been considered, a final Stage 4 IADP Report will be produced to support the Regulation 19 Local Plan for Submission.

1.3. Document structure

1.3.1. The remainder of this document is structured as follows:

- Section 2 summarises the policy framework and demographic context for the IADP, as well as setting out the development trajectory which underpins the infrastructure needs assessment;

- Sections 3, 4 and 5 describe for each infrastructure topic the needs likely to be generated by growth to 2041, planned projects to meet demand, any gaps in provision, and associated costs, funding and delivery arrangements; and
- Section 6 presents key findings, summarising Colchester's infrastructure needs to 2041, identified costs, and implications for funding and delivery.

2. Context and planned growth

2.1. Policy framework

2.1.1. National, regional and local policies and guidance relevant to the delivery of infrastructure in Colchester include: the National Planning Policy Framework (2024); the National Infrastructure Strategy (2020); the Colchester Local Plan Section 1 (2021); the Colchester Local Plan Section 2 (2022); the Colchester Infrastructure Delivery Plan (2017) and the Update Report (2021); the Tendring Colchester Borders Garden Community (TCBGC) Development Plan Document (2024); and the TCBGC Infrastructure Delivery, Phasing and Funding Plan (2023).

2.1.2. The policy framework relevant to population and economic growth in Colchester over the existing and emerging Local Plan periods emphasises the importance of ensuring the appropriate infrastructure is in place to meet the needs of current and future communities. This IADP is therefore set against the context of positively planning for growth in line with the historic achievement of housing delivery targets, and policy aspirations to deliver against future housing needs.

2.1.3. A full policy baseline is set out in the Stage 1 and 2 IADP Report.

2.2. Current profile of Colchester

2.2.1. The population of Colchester is growing and ageing. The economic activity rate is slightly below that of the region, and some pockets of deprivation exist, although these are limited in spatial extent. The economy of Colchester is growing and there are good levels of educational attainment. Promoting sustainable communities in line with population growth will involve ensuring sufficient amounts of housing and employment opportunities are in place, and that communities are supported and connected by adequate physical and social infrastructure.

2.2.2. A full profile of Colchester has been outlined in the Stage 1 and 2 Report of this IADP.

2.3. Growth in Colchester to 2041

2.3.1. As part of the Local Plan review process, CCC considered a range of approaches to the spatial distribution of growth. Seven spatial options were developed, varying in their driving aspirations and objectives. The implications of the spatial options in terms of infrastructure provision were considered within the Stage 1 and 2 IADP Report.

2.3.2. For this Stage 3 IADP Report, CCC provided an emerging development trajectory which is summarised below. This represents a scenario for the potential delivery of housing and employment land in Colchester and is aligned with the Draft Preferred Option Local Plan (produced in Feburary 2025).

2.3.3. Table 2-1 shows forecast housing delivery by key time bands (five-year phases) over the period of the Local Plan Review to 2041. 21,053 homes are forecast to come forward between 2025 and 2041, with the second phase (2030/31 to 2035/36) set to deliver the greatest proportion of homes (51%). The emerging development trajectory is made up of 234 housing sites.

Table 2-1 Summary of housing growth by five-year phase

Planning Status	2025/26 to 2029/30	2030/31 to 2035/36	2036/37 to 2041/42	Total Housing Units
	1-5 years	5-10 years	10-15 years	
New Housing Units	5,647	10,806	4,600	21,053
Cumulative New Housing Units	5,647	16,453	21,053	**21,053**

Source: Colchester City Council, 2025

2.3.4. The emerging development trajectory has identified 234 sites on which housing units could potentially be delivered up to 2041, comprising 36 preferred option allocations which may be included within the revised Local Plan, 16 existing allocations carried forward from the adopted Local Plan, and 182 existing commitments which already have planning permission. An additional 2,200 dwellings will be delivered across various windfall sites.

Table 2-2 Summary of housing growth by planning category

Planning Status	2025/26 to 2029/30	2030/31 to 2035/36	2036/37 to 2041/42	Total Housing Units
	1-5 years	5-10 years	10-15 years	
Preferred Option Allocations	1,245	6,140	2,485	9,870
Existing Allocations	215	864	140	1,219
Existing Commitments	4,187	2,602	975	7,764
Windfall		1,200	1,000	2,200
Total	5,647	10,806	4,600	**21,503**

Source: Colchester City Council

2.3.5. Housing growth will be delivered across different locations within Colchester. The location of housing growth associated with the existing and potential emerging allocations is detailed in Table 2-3. A substantial number of homes will be delivered in Marks Tey (2,500), East Colchester (2,300), Langham (910), and South Colchester (875). Existing commitments are not broken out below but the location with the most homes to be delivered by 2041 is the TCBGC (1,700). The location of the additional 2,200 dwellings to be delivered across various windfall sites is not currently known.

Table 2-3 Planned housing growth by location

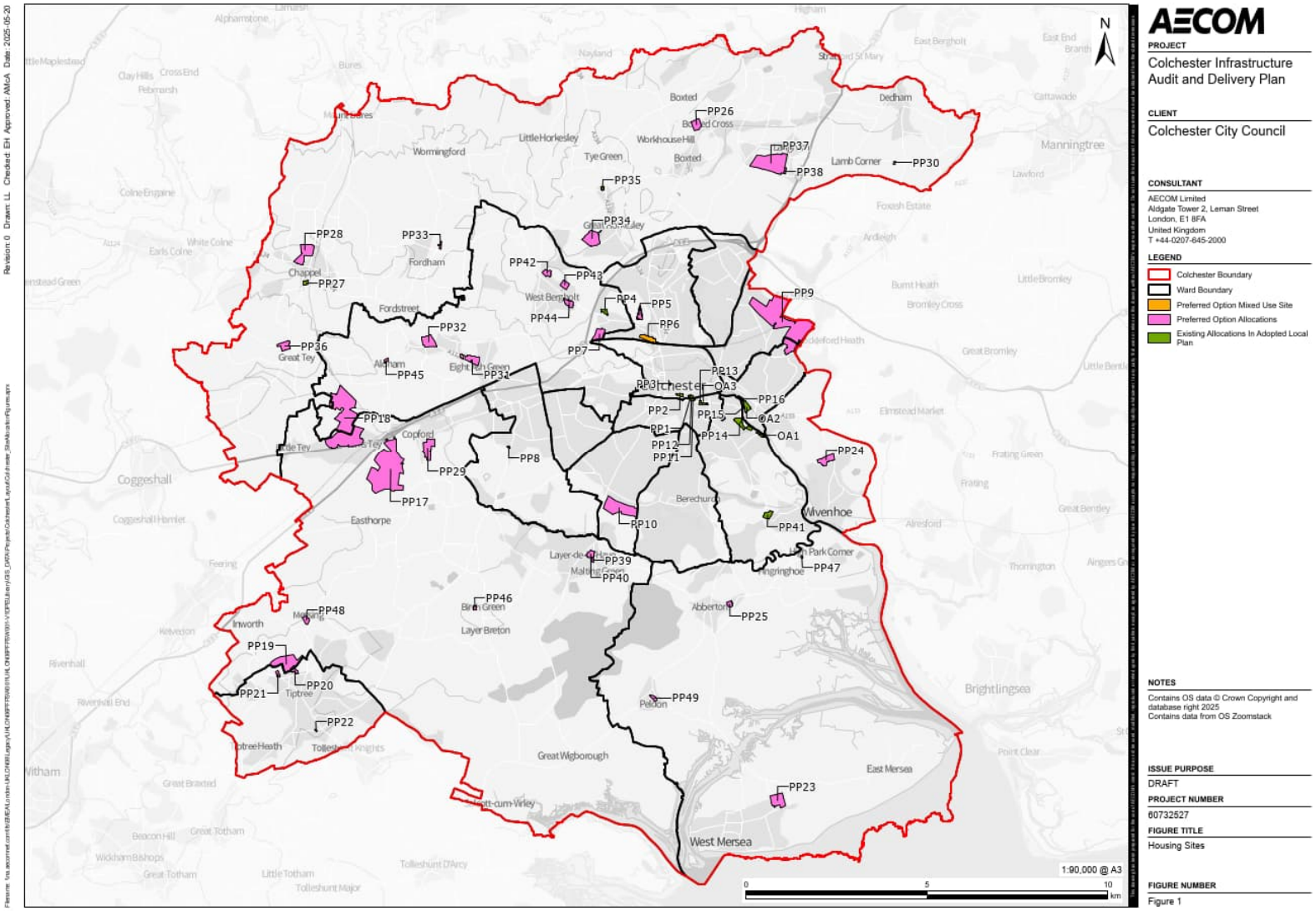
Location	2025/26 to 2029/30	2030/31 to 2035/36	2036/37 to 2041/42	Total Housing Units
	1-5 years	5-10 years	10-15 years	
Existing and potential emerging allocations				
Colchester City Centre	110	191	-	**301**
North Colchester	100	330	-	**430**
East Colchester	240	1,285	775	**2,300**
Regeneration Area	-	350	100	**450**
South Colchester	50	450	375	**875**
West Colchester	5	-	-	**5**
Tiptree	120	450	75	**645**
West Mersea	100	200	-	**300**
Wivenhoe	75	100	-	**175**

Location	2025/26 to 2029/30 1-5 years	2030/31 to 2035/36 5-10 years	2036/37 to 2041/42 10-15 years	Total Housing Units
Abberton and Langenhoe	50	-	-	**50**
Boxted	50	100	-	**150**
Chappel and Wakes Colne	65	170	-	**235**
Copford	50	250	-	**300**
Dedham and Dedham Heath	15	-	-	**15**
Eight Ash Green	60	370	-	**430**
Fordham	-	25	-	**25**
Great Horkesley	-	413	-	**413**
Great Tey	-	100	25	**125**
Langham	100	610	200	**910**
Layer De La Haye	40	30	-	**70**
Marks Tey	125	1,350	1,025	**2,500**
Rowhedge	25	25	-	**50**
West Bergholt	75	150	25	**250**
Aldham	-	15	-	**15**
Birch	-	15	-	**15**
Fingringhoe	5	-	-	**5**
Messing	-	25	-	**25**
Peldon	-	-	25	**25**
Various wards		1,200	1,000	**2,200**
Existing Commitments				
Various wards	4,187	2,602	975	**7,764**
Total	**5,647**	**10,806**	**4,600**	**21,053**

Source: Colchester City Council

2.3.6. Figure 2-1 below illustrates the location of the potential housing sites to 2041 (potential emerging allocations and existing allocations only).

Figure 2-1 Housing growth sites (potential emerging allocations and existing allocations) 2025 – 2041



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LEGEND
- Colchester Boundary
- Ward Boundary
- Preferred Option Mixed Use Site
- Preferred Option Allocations
- Existing Allocations In Adopted Local Plan

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PROJECT NUMBER
60732527

FIGURE TITLE
Housing Sites

FIGURE NUMBER
Figure 1

Employment Sites

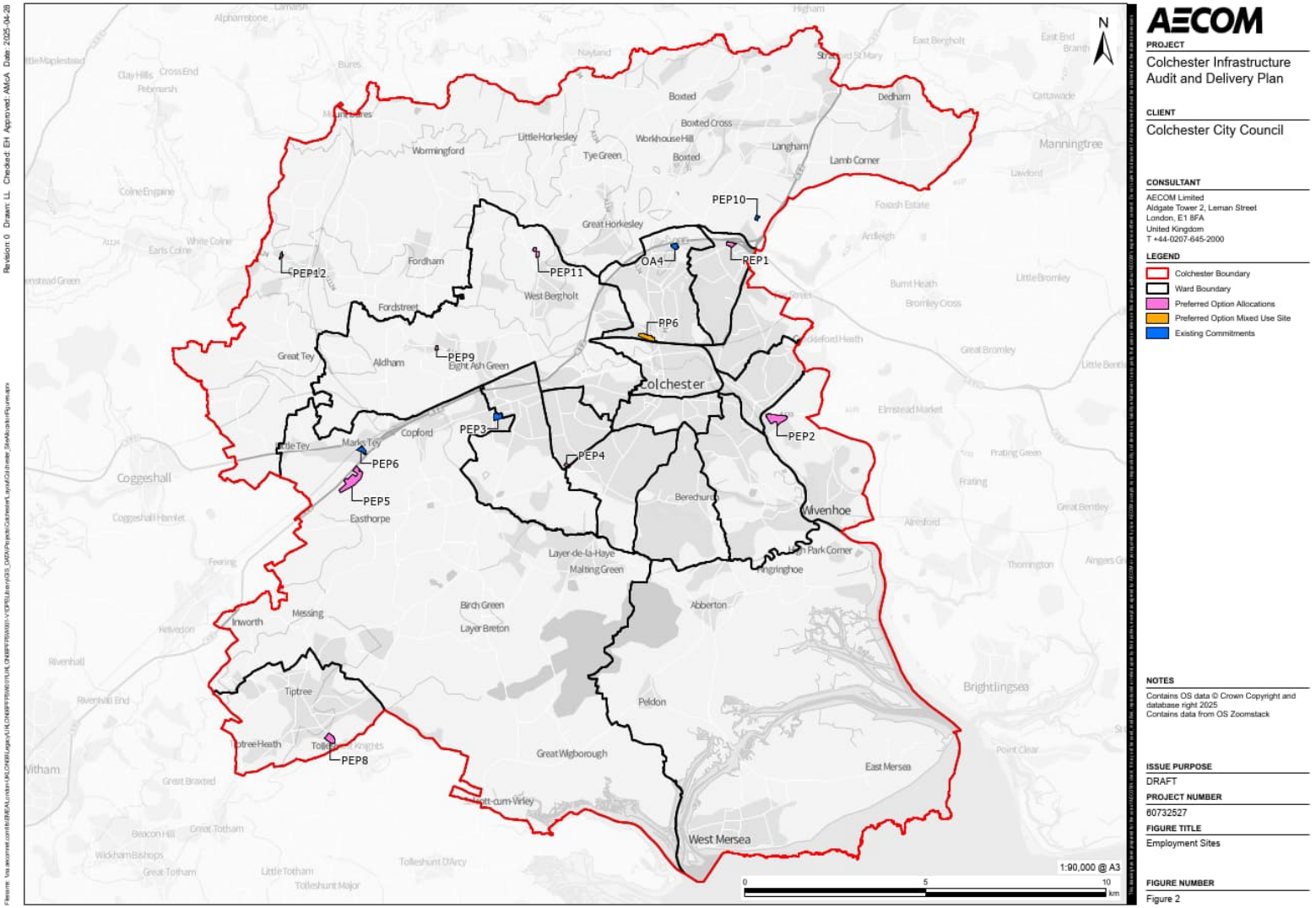
2.3.7. The development trajectory provided by CCC also identifies allocated employment sites, which are shown in Figure 2.

2.3.8. The employment sites comprise existing allocations carried forward from the adopted Local Plan as well new employment sites allocated within the Draft Preferred Options Local Plan. In addition, some committed employment sites which have planning permission and which are safeguarded for employment use within planning policy are identified.

2.3.9. Collectively, 15 sites are identified which total 47.8 hectares of employment land.

2.3.10. Two allocations made within other documents rather than the Draft Preferred Options Local Plan are included with the data but not shown on Figure 2. These are Tendring Colchester Border Garden Community (Policy ST9) which is covered by Policy GC5 and the Framework Plan within the TCBGC DPD; and Highland Nursery Tiptree (Policy PEP 7) which is covered by Policy TIP 15 of the Tiptree Neighbourhood Plan Policy. Delivery of these allocations is expected to continue into the Plan period up to 2041 and will contribute to the supply for Colchester.

Figure 2-2 Employment growth sites (existing sites and allocations) 2025-2041



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- Existing Commitments

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ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60732527

FIGURE TITLE
Employment Sites

FIGURE NUMBER
Figure 2

Revision: 0 Drawn: LL Checked: EH Approved: AM/CA Date: 2025-04-28

2.4. Summary

2.4.1. The policy framework relevant to population and economic growth in Colchester over the existing and emerging Local Plan periods emphasises the importance of ensuring the appropriate infrastructure is in place to meet the needs of current and future communities. This IADP is therefore set against the context of positively planning for growth in line with the historic achievement of housing delivery targets, and policy aspirations to deliver against future housing needs.

2.4.2. The population of Colchester is growing and ageing. The economic activity rate is slightly below the regional comparison and some pockets of deprivation exist, although these are limited in spatial extent. The economy of Colchester is growing and there are good levels of educational attainment.

2.4.3. For this Stage 3 IADP Report, CCC provided an development trajectory. This represents a scenario for the potential delivery of housing and employment land in Colchester and is consistent with the Draft Preferred Options Local Plan produced in February 2025.

2.4.4. 21,053 homes are forecast to come forward between 2025 and 2041, with the second phase (2030/31 to 2035/36) set to deliver the greatest proportion of homes (51%). The emerging development trajectory is made up of 234 housing sites comprising 36 preferred option allocations to be included within the revised Local Plan, 16 existing allocations included within the adopted Local Plan, and 182 existing commitments which already have planning permission. Housing growth will be delivered across different locations within Colchester. A substantial number of homes will be delivered in Marks Tey (2,500), East Colchester (2,300), TCBGC (1,700 units), Langham (910), as well as South Colchester (875).

2.4.5. The emerging development trajectory provided by CCC also identifies existing allocations carried forward from the adopted Local Plan as well new employment sites allocated within the Draft Preferred Options Local Plan. In addition, some committed employment sites which have planning permission and which are safeguarded for employment use within planning policy are identified. All together, 15 employment sites are identified which collectively make up 47.8 ha of development land.

3. Infrastructure assessment: social infrastructure

3.1. Primary education

Baseline

Current provision

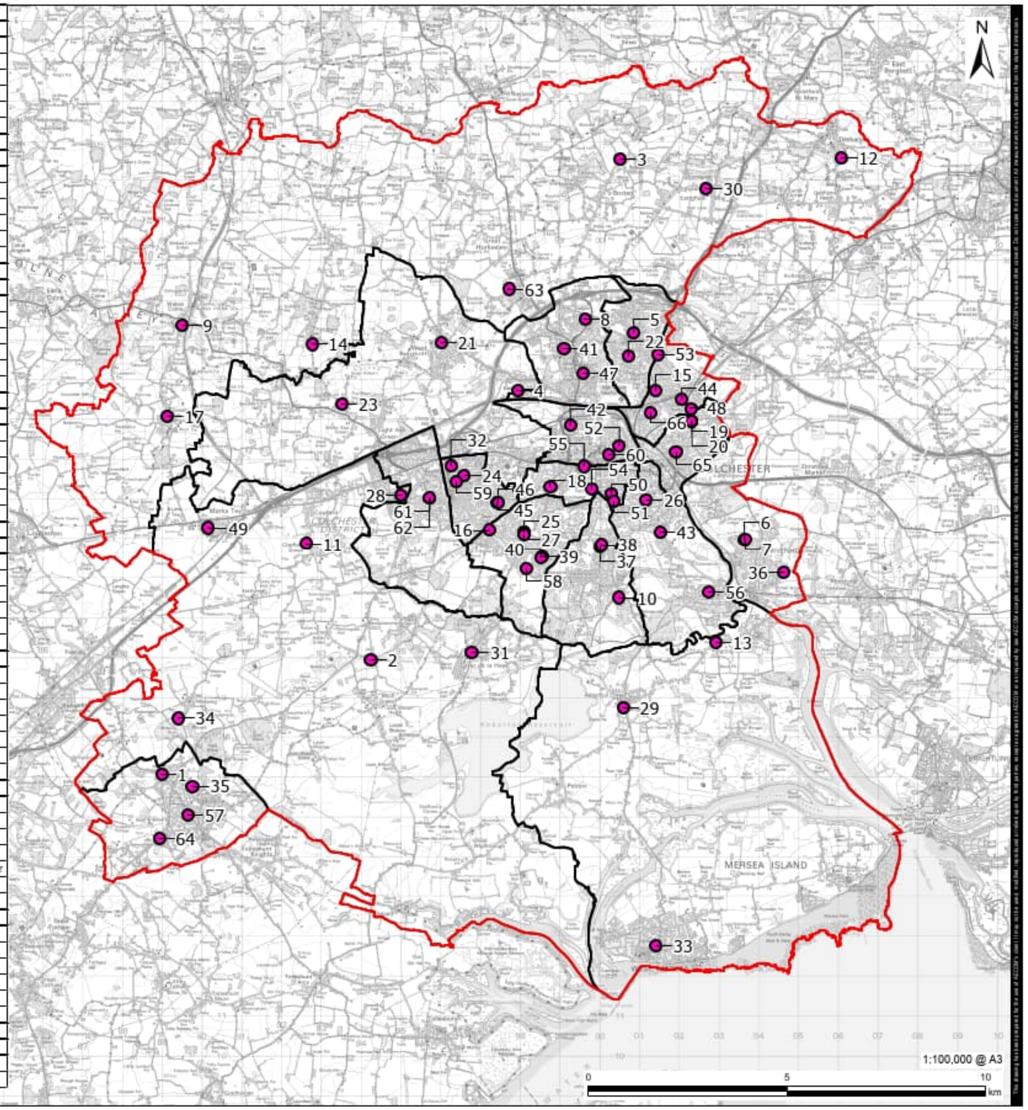
3.1.1. There are 64 state funded primary schools in Colchester. Data from the January 2025 Schools Census shows that spare capacity in primary schools is reasonably limited: there were 16,269 primary school pupils on roll in Colchester and surplus capacity of 1,490 primary school places[3]. It is estimated that at 95% capacity, there is a surplus of 602 primary school places[4]. A map of primary schools in Colchester is shown in Figure 3-1.

[3] Essex County Council, (2025); Academic Year 2024/2025 Number of Pupils on Roll – from January 2025 School Census.
[4] As referenced in the Essex County Council's '10 Year Plan' for school planning, the National Audit Office report 'Capital Funding for New School Places' (2013) refers to minimum 5% surplus that the Department for Education assumes in its planning as necessary to support operational flexibility.

Figure 3-1 Primary schools in Colchester

Revision: 0 Drawn: LL Checked: AMcA Approved: EH Date: 2024-07-29

Label	Primary School Name
1	Baynards Primary School
2	Birch Church of England (Voluntary Aided) Primary School
3	Boxted St Peter's Church of England Primary School
4	Braiswick Primary School
5	Brinkley Grove Primary School
6	Broomgrove Infant School
7	Broomgrove Junior School
8	Camulos Academy
9	Chappel CofE Controlled Primary School
10	Cherry Tree Academy
11	Copford Church of England (Voluntary Controlled) Primary School
12	Dedham Church of England (Voluntary Controlled) Primary School
13	Fingringhoe Church of England (Voluntary Aided) Primary School
14	Fordham All Saints CofE Voluntary Controlled Primary School
15	Friars Grove Primary School
16	Gosbecks Primary School
17	Great Tey Church of England (Voluntary Controlled) Primary School
18	Hamilton Primary School
19	Hazelmere Infant School and Nursery
20	Hazelmere Junior School
21	Heathlands Church of England (Voluntary Controlled) Primary School
22	Highwoods Community Primary School, Colchester
23	Holy Trinity CofE Primary School, Eight Ash Green and Aldham
24	Home Farm Primary School
25	Iceni Academy
26	Kendall Church of England Primary School
27	King's Ford Infant School and Nursery
28	Lakelands Primary School
29	Langenhoe Community Primary and Pre School
30	Langham Primary School
31	Layer-De-La-Haye Church of England (Voluntary Controlled) Primary School
32	Lexden Primary School with Unit for Hearing Impaired Pupils and Nursery
33	Mersea Island School
34	Messing Primary School
35	Milldene Primary School
36	Millfields Primary School
37	Monkwick Infant School and Nursery
38	Monkwick Junior School
39	Montgomery Infant School and Nursery, Colchester
40	Montgomery Junior School, Colchester
41	Myland Community Primary School
42	North Primary School and Nursery
43	Old Heath Community Primary School
44	Parsons Heath Church of England (Voluntary Controlled) Primary School
45	Prettygate Infant School
46	Prettygate Junior School
47	Queen Boudica Primary School
48	Roach Vale Primary School
49	St Andrew's Church of England Primary Academy, Marks Tey
50	St George's School: Towers Campus
51	St George's School: Woodland campus
52	St James' Church of England Primary School, Colchester
53	St John's Church of England (Voluntary Controlled) Primary School, Colchester
54	St John's Green Primary School: Abbey Field Site
55	St John's Green Primary School: Town Site
56	St Lawrence Church of England Primary School, Rowhedge
57	St Luke's Church of England (Controlled) Primary School, Tiptree
58	St Michael's Primary School and Nursery, Colchester
59	St Teresa's Catholic Primary School, Colchester
60	St Thomas More's Catholic Primary School, Colchester
61	Stanway Fiveways Primary School
62	Stanway Primary School
63	The Bishop William Ward Church of England Primary School
64	Tiptree Heath Primary School
65	Unity Primary Academy
66	Willow Brook Primary and Nursery, Colchester



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LEGEND

Colchester Boundary
Ward Boundary
Primary School

NOTES

ISSUE PURPOSE

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PROJECT NUMBER

60732527

FIGURE TITLE

Primary Schools

FIGURE NUMBER

Figure 1

Infrastructure requirements to 2041

3.1.2. ECC tested the development scenario provided by CCC, which includes a total of 19,138 qualifying dwellings (a discount was applied to reflect that one bedroom houses are assumed to have a pupil yield of 0). A breakdown by unit type was not available, so all were treated as houses to calculate a 'worst case' outcome. The sites were matched to their 'nearest' schools using ArcGIS. Phasing information was not used, as this test considers the full impact of growth by the end of the emerging Local Plan period (2041).

3.1.3. The scenario has been assessed using ECC's standard per dwelling pupil product factors: 0.3 primary school children per qualifying house, and 0.2 secondary school age children per qualifying house. These factors are based on average demand. Starting with younger cohorts, actual numbers generally peak at higher levels in the period shortly after new homes are first occupied.

3.1.4. Analysis is by geographical 'school planning groups' that are agreed with the Department for Education as part of the annual School Capacity Survey (SCAP). Each site in the scenario test has been matched to its closest primary and secondary school. Minor adjustments are made, where appropriate, to aid analysis and reflect constraints. The schools in each planning group are listed in ECC's Ten Year Plan[5].

3.1.5. The following measures have been applied to assess the likely surplus / deficit in provision:

- How much space do we have / need based on current numbers on roll plus the new housing but retaining 5%[6] of the current capacity unfilled?
- What is the surplus / deficit including all the housing at the highest point of underlying demand shown in the forecasts (no unfilled capacity retained)?
- How much space is forecast by 2035/36 (the end of ECC's 10 Year forecast period) but retaining 5%[7] of the current capacity unfilled?

3.1.6. These measures help identify 'worst case' and provide a robust benchmark against which the soundness of a Local Plan, in school place planning terms, can be assessed. Birth rates have been falling in recent years and, thereby, current Number on Roll (NOR) and peak forecasts may overstate demand if fertility rates do not return to previous levels. On this basis, the following recommendations may not address the higher potential demand indicated in every area.

3.1.7. The scenario test indicates that demand would be generated for 5,741 primary school places, which would translate into between 18.7 FE and 23.5 FE surplus demand.

Table 3-1 Primary School Demand Scenario Test Results

Group	Qualifying Houses	Pupils from new housing	Pupils from new housing (FE)	Published Admission Number (2025)	Jan 2025 Reception NOR	2025 No Housing Forecast		Surplus Places After Housing		
						Peak Reception Size	2035/36 Reception	Using NOR but keeping 5% of capacity unfilled	Based on Peak Demand (all capacity filled)	2035/36 Demand keeping 5% of capacity unfilled
Colchester Primary A: North (Langham)	1,146	344	1.6	76	75	68	55	-1.7	-1.4	-1.1
Colchester Primary B: Northwest (Tey)	1,899	570	2.7	94	73	66	62	-2.2	-1.8	-1.8
Colchester Primary C: City north (Highwoods)	3,164	949	4.5	585	518	529	529	-3.3	-2.7	-3.6
Colchester Primary D: City east (Greenstead)	4,019	1,206	5.7	210	180	186	178	-5.1	-4.9	-5.0
Colchester Primary E: City southwest (Stanway)	3,485	1,045	5.0	500	474	446	390	-4.9	-3.2	-2.1
Colchester Primary F: City southeast (Berechurch)	2,907	872	4.2	600	546	555	538	-3.4	-2.7	-3.1
Colchester Primary G: East (Wivenhoe)	453	136	0.6	90	87	75	55	-0.7	-0.1	0.4
Colchester Primary H: Southwest (Messing & Tiptree)	1,331	399	1.9	117	108	112	110	-1.8	-1.7	-1.9
Colchester Primary I: Southeast (Fingringhoe)	283	85	0.4	60	53	60	60	-0.3	-0.4	-0.5
Colchester Primary J: Mersea	452	136	0.6	60	44	45	35	-0.2	-0.1	0.1
Grand Total	**19,138**	**5,741**	**27.3**	**2,392**	**2,158**	**2,142**	**2,012**	**-23.5**	**-19.0**	**-18.7**

Source: ECC. Notes: Pupil Numbers on Roll are from the May 2025 School Census. The pupil forecasts were produced in May 2025. These forecasts exclude pupils from new housing so as not to double count. School capacity is based on the Published Admission Numbers for September 2025 i.e. the number of places each school is expected to offer for the 2025/26 academic

[5] ECC, 2025; 'Meeting the demand for mainstream school places in Essex'. Available at: https://www.essex.gov.uk/schools-and-learning/schools/school-organisation-and-place-planning
[6] Figure recommended by the Audit Commission.
[7] Figure recommended by the Audit Commission.

year in Reception (primary) or Year 7 (secondary). Negative figures in the final three columns suggest a potential deficit in provision.

3.1.8. The considerations and conclusions for each school planning group, regarding demand for primary school places and required provision to 2041, are set out below:

- Colchester Primary A: North (Langham): The majority of growth in this group relates to the 818 qualifying unit proposal at Park Lane in Langham. The development would be unlikely to generate sufficient demand to make a new school viable in this location. However, there isn't space to significantly expand Langham Primary on their current site. Other options must be put forward and a self-funding solution identified for this level of growth to be sound in pupil place planning terms.
- Colchester Primary B: Northwest (Tey): The largest development within the group is 909 homes 'North of A120'. This level of growth is insufficient to sustain a new primary school in itself but is too great to be accommodated at St Andrew's CE Academy, which has limited expansion potential. It is understood that further growth in this location will be delivered beyond the immediate Local Plan period. Until then, capacity may have to be found in conjunction with Group E. This could lead to unacceptable school travel patterns.
- Colchester Primary C: City north (Highwoods): A primary phase, adding 2 FE, is planned for the Trinity School. The Local Plan should allocate the land at Chesterwell for school use (F1). School expansions may also be needed to make up any shortfall. Although there are drawbacks with each potential option, it should be possible to find solutions to meet demand towards the higher end of the range indicated by the assessment.
- Colchester Primary D: City east (Greenstead): This area includes 1,545 qualifying units within the Colchester Tendring Garden Community, which should be self-sustaining and provide land for a new primary school. Land should also be allocated at 'NE Colchester' (1,818 qualifying units). Most of the existing school sites in this area are not considered suitable for significant expansion. Willow Brook Primary does have sufficient land to expand but would not be the closest school for any of the sites included in this test.
- Colchester Primary E: City southwest (Stanway): The expected level of demand may be met by recommissioning capacity at Fiveways Primary and at Gosbecks Primary plus by establishing a new school on the London Road site (extant Local Plan). However, the development South of Mark's Tey Village (P17) could generate nearly 2 FE of demand and a new school to serve that development may also be needed to meet Group B demand if the minimum viable number for a new school in Mark's Tey, north of the A12 (P18), cannot be guaranteed by the end of the Plan period.
- Colchester Primary F: Some local schools have reduced their admission numbers and recommissioning these places, plus expansion schemes, should be sufficient to meet the indicted level of additional need.
- Colchester Primary G: East (Wivenhoe): A scheme to expand Millfields Primary has been looked at but the level of demand indicated may not require additional permanent provision. Bulge classes may have to be considered, and pressure may be placed on the area's schools prior to new ones on the Tendring Colchester Border Garden Community opening.
- Colchester Primary H: Southwest (Messing and Tiptree): Two local schools have been operating with reduced admission numbers and, with suitable works, could take more pupils (2 x 0.5FE). Additional land that would allow Milldene Primary to expand is also included in a s106 agreement.
- Colchester Primary I: Southeast (Fingringhoe): Whilst Fingringhoe and Langenhoe are in a position to accommodate more local pupils, there is already a close match between local demand and capacity at St Lawrence in Rowhedge. This school does not have expansion potential and any further development cannot be accommodated. An option to secure extra land for the school must be investigated.

- Colchester Primary J: Mersea: The number of children living on the island has been falling. However, although the current forecasts suggest the number of pupils generated by this development scenario can be accommodated at the Mersea Island Primary, a high degree of flexibility is necessary given the lack of alternative options. Bulge classes or an expansion of the school may be required.

3.1.9. Table 3.2 below shows ECC's recommendations regarding land allocations for education to 2041. There are four sites in Colchester where land has already been allocated for education within the extant Local Plan and s106 agreements. ECC suggest that under the current scenario being tested as the preferred option for the new Local Plan to 2041, land for at least three additional schools should be allocated. 2.18ha sites are requested for new primary schools as, based on DfE Building Bulletin 103[8], this is ideal for a 2FE primary with commensurate Early Years and Childcare provision (EY&C) but also provides space for the school to temporarily expand by a form of entry during 'bulge' periods.

Table 3-2 Education Land Allocations to 2041

Settlement	Existing Local Plan to 2031	New Local Plan to 2041
Langham		TBC.
North of A12*, Marks Tey		Allocate 2.18ha site (primary including EYEC).
Chesterwell	Land included in extant Local Plan and s106 to extend Trinity School's age range.	
Northeast Colchester		Allocate 2.18ha site (primary including EYEC).
Colchester Tendring Garden Community	Land for new schools as set out in the extant Local Plan and DPD (at least five new primary schools).	
London Road, Stanway	Land included in extant Local Plan and s106 for primary / EYEC	
South of Marks Tey / Copford		Allocate 2.18ha site (primary including EYEC).
Barbrook Lane, Tiptree	Land is included in the extant s106 for Milldene primary	
Rowhedge		TBC.

Source: ECC.
**May not be needed during Plan period if school built south of Mark's Tey.*

3.1.10. ECC also commented that existing land for education use set out in extant s106 agreements should also be formally allocated for education and childcare use, to ensure the options relied upon in the above comments are retained in the event of any alternative permissions being sought.

Costs, funding and delivery

3.1.11. At the time of writing and without further analysis, the costs of the primary school projects set out above is not yet known. A high level bench-marking approach has therefore been used to estimate costs of primary school provision to 2041.

[8] Department for Education, (2014); Area guidelines for mainstream schools: Building Bulletin 103. Available at: https://assets.publishing.service.gov.uk/media/5f23ec238fa8f57acac33720/BB103_Area_Guidelines_for_Mainstream_Schools.pdf

3.1.12. Based on ECC estimates[9] the cost per pupil for a new primary school is estimated to be £24,416 and £20,450 for an extension to an existing primary school. The average of these two figures (£22,433) has been applied to the primary school pupils associated with the potential emerging allocations[10]. This gives an indicative cost and funding gap of £73.0m.

3.1.13. The Basic Need Fund is allocated by the Department for Education (DfE) to ECC to contribute towards school place sufficiency in areas of need where no other funding sources are available. The School Capacity Annual Survey (SCAP) determines the level of 'Basic Need' funding that ECC is allocated. In addition, Free School funding is available from the DfE[11] which goes directly to schools and is independent of ECC.

Summary

3.1.14. There are 64 state funded primary schools in Colchester.

3.1.15. ECC tested the growth scenario implied by the emerging development trajectory and found that demand would be generated for 5,741 primary school places, translating into 18.7 FE to 23.5 FE surplus demand.

3.1.16. The overall impact of the development set out in the scenario on mainstream statutory age education can be mitigated through the allocation of the land for school use and planning obligations (set out the ECC Developers' Guide to Infrastructure Contributions).

3.1.17. There are four sites in Colchester where land has already been allocated for education within the extant Local Plan and s106 agreements. New primary schools will be provided at the TCBGC. In addition, ECC has identified at least three locations where land should be allocated for additional primary schools, and a number of other locations where new or expanded schools will be required.

3.1.18. A high level benchmarking exercise indicates that the cost and funding gap associated with pupils arising from the potential emerging allocations would be £73.0m.

3.2. Early years education and childcare

Baseline

Current provision

3.2.1. Local authorities must ensure that there is sufficient, affordable and accessible childcare for working parents or parents in education / training. ECC meets this statutory duty by working in partnership with a diverse range of early years provisers including day nurseries, pre-schools, childminders and childminder agencies, primary school nurseries, independent nursery schools and maintained nursery schools.

3.2.2. As of 2023, 85.7% of families in Colchester were eligible for the Funded Early Education Entitlement (FEEE) for 2-year-olds and 91.4% of families which were eligible for FEEE for 3- and 4-year-olds took it up. In 2023 the Government announced a programme of Childcare Reforms which has increased eligibility for Funded Early Education Entitlement (FEEE) childcare places to include children from 9 months to statutory school age, and the offer is extended to support more working families. This is being implemented in stages and will not be fully available until September 2025.

3.2.3. Based on ECC's latest childcare sufficiency assessment (summer 2025, see Table 3-3 below), there are 258 early years and education and childcare (EYEC) providers in Colchester supplying a maximum of 5,303 places[12]. The majority of EYEC provision is delivered by the Private, Voluntary, and Independent (PVI) sector in Colchester; with funded

[9] Essex County Council, (2025); ECC Developers' Guide to Infrastructure Contributions.
[10] Demand associated with the emerging potential allocations only is estimated at 3,255 pupils. Existing allocations and existing commitments have not been included in the cost and funding gap estimate because they are subject to extant s106 and Local Plan allocations.
[11] Revenue funding for further education was previously provided by the Education and Skills Funding Agency (ESFA) up until April 2025. As of April 2025, the ESFA has become part of the DfE.
[12] Essex County Council, (2025); Colchester Childcare Sufficiency Data.

childminders (22%), unfunded childminders (9%), and pre-schools (10%) forming the majority of the EYEC supply.

3.2.4. Overall, in summer 2025 there were 845 vacant EYEC places across Colchester. However, Tiptree, Shrub End, Wivenhoe, St Anne's & St John's, Marks Tey & Layer,Rural North, Greenstead, Prettygate and Highwoods were all running at more than 90% occupancy. This demonstrates a lack of sufficient childcare places to meet either current or predicted demand created by local housing growth. ECC data indicates that the waiting list for Colchester EY providers in summer 2025 was nearly 16% of the total capacity.

3.2.5. ECC predicts a drop in the number of under fives in Colchester over the next two years, however numbers are forecast to increase from 2027.

Table 3-3 Provision and capacity of EYEC facilities in Colchester (Summer 2025)

Ward	Number of EYEC facilities								Capacity		
	Nursery	Primary school	Pre-school	Independent school	After-school clubs/ wraparound	Childminder (funded)	Childminder (not funded)	Holiday Club	Capacity total	Vacancy total	Vacancy total %
Berechurch	1	1	1	0	0	9	2	0	273	61	22.3%
Castle	5	2	2	0	0	2	4	3	446	164	36.8%
Greenstead	2	2	3	0	0	1	0	2	215	14	6.5%
Highwoods	2	0	3	0	1	3	1	1	265	9	3.4%
Lexden and Braiswick	4	0	2	1	0	4	2	4	540	130	24.1%
Marks Tey and Layer	2	0	4	1	3	1	1	2	353	15	4.2%
Mersea and Pyefleet	2	2	4	0	2	7	1	1	376	69	18.4%
Mile End	5	0	2	0	1	10	7	1	563	124	22.0%
New Town and Christ Church	2	1	4	2	2	3	0	1	278	55	19.8%
Old Heath and the Hythe	2	0	1	0	0	7	0	0	234	83	35.5%
Prettygate	1	1	4	0	0	8	3	3	308	27	8.8%
Rural North	1	0	5	1	3	3	3	2	161	7	4.3%
Shrub End	2	3	0	0	1	18	6	2	425	28	6.6%
St Anne’s and St John’s	1	1	4	0	2	3	4	1	242	5	2.1%
Stanway	1	0	3	0	0	3	4	0	187	21	11.2%
Tiptree	2	0	2	0	0	5	1	0	181	5	2.8%
Wivenhoe	2	0	1	0	0	3	1	0	256	28	10.9%
Total	**37**	**13**	**45**	**5**	**15**	**90**	**30**	**23**	**5,303**	**845**	**15.9%**

Source: Essex County Council, (2025); Colchester Childcare Sufficiency Data.

Infrastructure requirements to 2041

3.2.6. ECC indicates that the standard per dwelling early years pupil product factor is 0.12 per qualifying house and 0.06 per qualifying flat. Using the same approach as for primary school pupils (see section 3.1 above) and assuming 19,138 qualifying dwellings (all houses as a worst case), it is estimated that there will be demand for an additional 2,297 early years places to 2041.

3.2.7. In ECC's Stage 3 consultation response it is noted that where new housing developments create additional need for childcare places, new nursery buildings are required to accommodate the delivery of sufficient new places to meet the additional demand. ECC has an adopted design brief for Early Years and Childcare buildings that will create either a 30, 56 or 70 place provision. This brief will be applied depending on need. The Ofsted Regulation Framework governs how space is apportioned to the varying age groups and needs of young children. It also gives guidance on additional facilities required, over and above the classroom or play space.

3.2.8. Where possible, new Early Years provisions will be co-located on school sites although in some instances, standalone provision is preferable. The primary school sites required to 2041 are identified in Table 3.2 above. The TCBGC DPD sets out that up to five new primary schools are proposed, and each of these facilities must be co-located with a childcare facility.

Costs, funding and delivery

3.2.9. The ECC Developers' Guide to Infrastructure Contributions[13] estimates that the cost of a new EYEC facility per place will be £24,416 and £20,450 per place for an extension. The average of these two figures (£22,433) has been applied to the early years pupils associated with the potential emerging allocations[14]. This gives an indicative cost and funding gap of £29.2m.

3.2.10. Where needs arise, developers will be required to either provide a building (on larger sites) or financial contributions towards EYEC facilities.

3.2.11. EYEC provision in Colchester is primarily led by the Private, Voluntary, and Independent (PVI) sector, and therefore will be delivered through a market-led commissioning approach reflecting population growth and market demand.

Summary

3.2.12. ECC meets its statutory duty to provide childcare by working in partnership with a diverse range of early years providers. The majority of EYEC provision in Colchester is delivered by the Private, Voluntary, and Independent (PVI) sector, with funded childminders (22%), unfunded childminders (9%), and pre-schools (10%) forming the majority of the EYEC supply.

3.2.13. Overall, in summer 2025 there were 845 vacant EYEC places across Colchester. However, Tiptree, Shrub End, Wivenhoe, St Anne's & St John's, Marks Tey & Layer,Rural North, Greenstead, Prettygate, and Highwoods wards were running at more than 90% occupancy. The waiting list for Colchester EY providers in summer 2025 was just under 16% of the total capacity.

3.2.14. There is a predicted drop in the number of under fives in Colchester over the next two years, however numbers are forecast to increase from 2027. In 2023 the Government announced a programme of Childcare Reforms which has increased eligibility for Funded Early Education Entitlement (FEEE) childcare places to include children from 9 months to statutory school age and the offer is extended to support more working families.

[13] Essex County Council, (2025); Essex County Council Developers' Guide to Infrastructure Contributions.
[14] Demand associated with the emerging potential allocations only is estimated at 1,302 pupils. Existing allocations and existing commitments have not been included in the cost and funding gap estimate because it is assumed they are subject to extant s106 and Local Plan allocations.

3.2.15. Using ECC's standard early years pupil product factor, it is estimated that there will be demand for an additional 2,297 early years places to 2041 arising from Colchester's development trajectory.

3.2.16. Where needs arise, developers will be required to either provide a building (on larger sites) or financial contributions towards EYEC facilities. Where possible, new early years provision will be co-located on school sites although in some instances, standalone provision is preferable.

3.2.17. Using cost benchmarks within the ECC Developers' Guide to Infrastructure Contributions, costs to provide for early years pupils associated with the potential emerging allocations are estimated at £29.2m.

3.3. Secondary education

Baseline

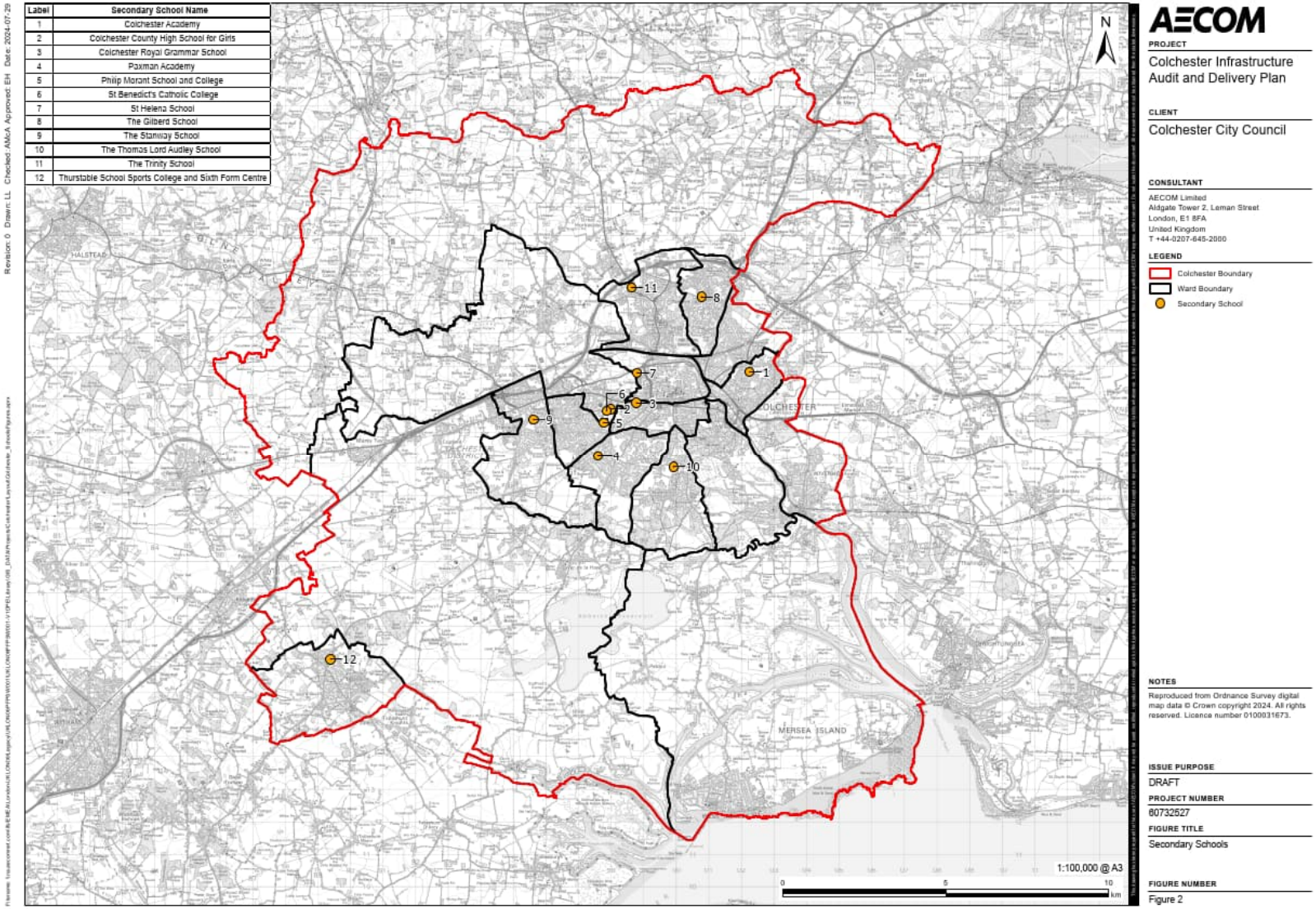
Current provision

3.3.1. There are currently 12 state-funded secondary schools in Colchester. These schools are a mixture of sizes and comprise of 11 academy schools and 1 voluntary aided school. A map of secondary school provision is shown in Figure 3-2.

3.3.2. Data from the January 2025 Schools Census[15] shows that there are 13,266 secondary school pupils on roll in Colchester, compared with a capacity of 14,044 secondary school places, suggesting there is a surplus capacity of 778 secondary school places. It is estimated that at 95% capacity[16], there is a deficit of 76 secondary school places.

[15] Essex County Council, 2025; 'Academic Year 2024/2025 Number of Pupils on Roll – from January 2025 School Census .
[16] As referenced in the Essex County Council's '10 Year Plan' for school planning, the National Audit Office report 'Capital Funding for New School Places' (2013) refers to minimum 5% surplus that the Department for Education assumes in its planning as necessary to support operational flexibility.

Figure 3-2 Secondary schools in Colchester



Infrastructure requirements to 2041

3.3.3. ECC used the same approach as for primary school pupils to estimate demand for secondary school pupils to 2041 (see section 3.1 above). ECC's standard per dwelling pupil product factor is 0.2 secondary school age children per qualifying house. ECC's two planning areas for the CCC are Mid (Colchester) which covers most of the local authority area and South (Thurstable) which covers Thurstable.

Figure 3-3 Secondary School Demand Scenario Test Results

Group	Qualifying Houses	Pupils from new housing	Pupils from new housing (FE)	Published Admission Number (2025)	Jan 2025 Year 7 NOR	2025 No Housing Forecast		Surplus Places After Housing		
						Peak Year 7 Size	2035/36 Year 7	Using NOR but keeping 5% of capacity unfilled	Based on Peak Demand	2035/36 Demand keeping 5% of capacity unfilled
Colchester Secondary Group A: Mid (Colchester)	17,735	3,547	23.6	2,322	2,319	2,383	1,826	-27.4	-25.7	-11.0
Colchester Secondary Group B: South (Thurstable)	1,400	280	1.9	210	197	210	170	-1.8	-1.9	-0.9

Source: ECC. Notes: Pupil Numbers on Roll are from the May 2025 School Census. The pupil forecasts were produced in May 2025. These forecasts exclude pupils from new housing so as not to double count. School capacity is based on the Published Admission Numbers for September 2025 i.e. the number of places each school is expected to offer for the 2025/26 academic year in Reception (primary) or Year 7 (secondary). Negative figures in the final three columns suggest a potential deficit in provision

3.3.4. The housing scenario generates around 25.5 FE additional secondary age pupils for whom a Colchester school would be their closest. Based on the approach outlined in section 3.1 above, additional capacity for between 11.9 FE and 29.2 FE and may need to be considered.

3.3.5. The considerations and conclusions for each school planning group, regarding demand for secondary school places and required provision to 2041, are set out below.

- Colchester Secondary A – Mid (Colchester): It is unlikely that future demand can be met through school expansion projects alone and a new secondary school site will need to be allocated. Around 2 FE of the need is generated by the 1,545 qualifying units arising from the Colchester Tendring Garden Community which will include its own secondary school provision. The TCBGC DPD[17] anticipates that one secondary school on at least 12.4ha of suitable land, or two secondary schools each on 7.9ha of suitable land, will be required. Aside of the Garden Community, the area served by the Stanway School includes the most development in this scenario, but not sufficient to fund or fill a new school in its own right. Land could be allocated for a new secondary school in this area, but it would be poorly located to serve the majority of other new homes that are included in this scenario within the Plan period. If, as indicated, further development north of the A120 (PP18) is allocated for delivery beyond the Plan period, travel patterns would improve over time. The next Local Plan would then need to consider appropriate 'replacement' capacity.
- Colchester Secondary A: South (Thurstable): The Thurstable School have recently closed their sixth-form and, with remodelling works, this accommodation could be commissioned to meet 11-16 age range need.

3.3.6. These projects have been included within the Project Schedule.

Costs, funding and delivery

3.3.7. At the time of writing and without further analysis, the costs of the secondary school projects set out above is not yet known. A high level bench-marking approach has therefore been used to estimate costs of primary school provision to 2041.

3.3.8. Based on ECC estimates[18] the total cost per pupil for a new secondary school is estimated to be £29,579; the cost is £28,127 for an extension to an existing secondary school (based on Q1 2023 prices). The average of these two figures (£28,853) has been applied to the

[17] Colchester City Council, Essex County Council, Tendring District Council, (2023); Tendring Colchester Borders Garden Community: Development Plan Document.
[18] Essex County Council, (2024); ECC Developers' Guide to Infrastructure Contributions.

secondary school pupils associated with the potential emerging allocations. This gives an indicative cost of £62.6m[19].

3.3.9. As outlined above, contributions for school provision are secured through S106 agreements, where development creates additional education requirements. The current trigger for developer contributions towards secondary education is 20 or more dwellings. ECC negotiate and secure necessary provision, capacity, and contributions towards capacity where there is demand as a result of development.

3.3.10. Furthermore, the DfE uses the SCAP to determine the level of 'Basic Need' funding that is allocated for secondary school provision in ECC. The Basic Need Fund contributes towards school place sufficiency in areas of need where no other funding sources are available.

3.3.11. The majority of secondary schools in Colchester are Academy Trusts or Academy Converters, and therefore receive funding directly from central government. ECC is increasingly acting as a commissioner, establishing requirements for provision, rather than a provider of new schools.

Summary

3.3.12. There are 12 state funded secondary schools in Colchester with 13,266 pupils on roll, compared with a capacity of 14,044 secondary school places, suggesting there is a surplus capacity of 778 secondary school places. It is estimated that at 95% capacity, there is a deficit of 76 secondary school places.

3.3.13. ECC tested the growth scenario implied by the emerging development trajectory and found that demand would be generated for between 11.9 FE and 29.2 FE.

3.3.14. The TCBGC will include its own secondary school provision, in the form of either one or two secondary schools. In addition, ECC suggests that land for secondary school provision should be allocated at an alternative location within the Mid (Colchester) planning area (either on a large housing allocation to support a new secondary school or in a location well connected to serve the majority of smaller allocations). Provision could also be expanded at Thurstable School in Tiptree.

3.3.15. A high level benchmarking exercise indicates that the cost of providing for pupils associated with the potential emerging allocations would be £62.6m.

3.3.16. The provision of new secondary schools will primarily be delivered through developer contributions. ECC acts as a commissioner, negotiating and securing funds to establish provision. However, during operation it is likely new schools will be academies and therefore not run by ECC.

3.4. Further education

Baseline

Current provision

3.4.1. There are three sixth forms that comprise part of secondary schools in Colchester; these are shown in Table 3-4. All are academy converter schools and two are selective grammar schools.

Table 3-4 Secondary schools with sixth form facilities

Secondary schools with sixth form facilities	Pupils on roll	Type of school
Colchester County High School for Girls	257	Academy Converter
Colchester Royal Grammar School	381	Academy Converter

[19] Demand associated with the emerging potential allocations only is estimated at 2,170 pupils. Existing allocations and existing commitments have not been included in the cost and funding gap estimate because they are subject to extant s106 and Local Plan allocations.

Secondary schools with sixth form facilities	Pupils on roll	Type of school
Philip Morant School and College	214	Academy Converter

Source: Essex County Council, (2024); Academic Year 2023/24 Secondary NOR – from January 2024 School Census.

3.4.2. Thurstable School Sports College and Sixth Form Centre, located in Tiptree, officially closed in September 2025. However, there is capacity within other Colchester further educational facilities, and facilities in wider Essex.

3.4.3. In addition, to the secondary schools listed above, further education is also provided by one college and one sixth form college. Table 3-5 lists the further education facilities available in Colchester.

Table 3-5 Further education colleges in Colchester

Further education college	Type	Full time students
Colchester Institute (three campuses)	College	3,850
The Sixth Form College, Colchester	Sixth Form College General	3,133

3.4.4. The Colchester Institute is the largest further education provider in North Essex and offers both further and higher education opportunities in Colchester. The Institute has campuses across Colchester, Braintree, as well as the Harwich Energy Skills Centre in Tendring. Across these campuses, the Institute provides opportunities for students to study T-Levels, apprenticeships, and vocational study programmes in a wide range of subjects. In 2022/23, there were 1,644 apprentices and 3,742 young learners (16 to 18-year olds) enrolled at Colchester Institute[20].

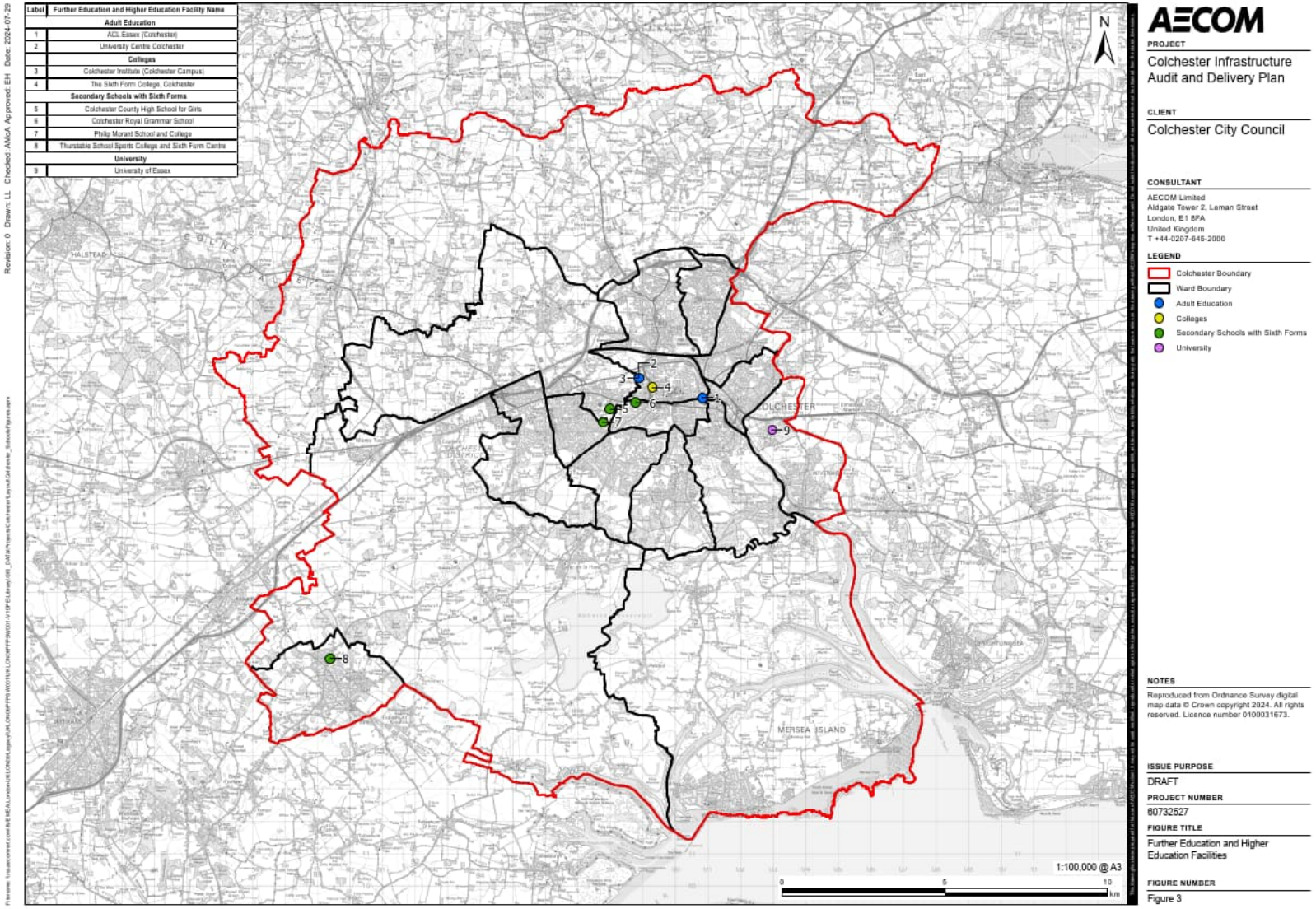
3.4.5. The Sixth Form College, Colchester offers A-Levels, BTECs, and applied general certificates/extended certificates to students in Essex. A recent Ofsted report from March 2024[21] states that there are currently 3,133 students on education programmes, predominantly on A-level courses. It is estimated that half of all students commute to the college from across Essex.

3.4.6. The latest data available from ECC[22] shows that 2,688 Colchester residents started a further education or higher education course in September 2023[23]. In addition, 80 Colchester residents started an intermediate level apprenticeship, 91 started an advanced level apprenticeship, and 38 started a higher-level apprenticeship.

3.4.7. Figure 3-4 shows the distribution of further education facilities in Colchester.

[20] Colchester Institute Corporation, (2023); Annual Report and Financial Statements.
[21] Ofsted, (2024); Inspection of The Sixth Form College Colchester.
[22] Information derived from consultation with the Commissioner for Skills Development at Essex County Council conducted in July 2024.
[23] Please note data received from ECC combines further education and higher education and data is not separated out by age.

Figure 3-4 Further and higher education provision in Colchester



Infrastructure requirements to 2041

3.4.8. The wide choice of education routes for 16 to 18-year olds means pupils often travel further afield. Therefore, the requirement for further education facilities in ECC is assessed on a case-by-case basis, and contributions will only be required if a need can be justified.

3.4.9. Housing growth in Colchester, and the supporting infrastructure requirements, are driving the demand for construction skills, as well as modern green and digital skills to adapt a changing sector. To support this growth, it is anticipated that three Colchester Institute Projects will move to Full Business Case (FBC) in early 2025: expansion of the Energy Skills Centre at the Harwich campus, Sustainable Skills Innovation Centre in the TCBGC, and a Green Energy Skills Centre at the Colchester campus[24].

3.4.10. The expansion of the Colchester Institute's Energy Skills Centre in Harwich will be able to accommodate a minimum of 300 candidates. It is anticipated that 50 apprentices will be delivered in its first year, and up to 150 apprentices thereafter. Moreover, the facility will support green skills required for Freeport East and other projects across Essex. The Project will develop c.800 sqm of workshop and training rooms to complement its existing engineering facilities and deliver training which will support the development of offshore wind including electronic engineering and manufacturing in the first instance, followed by new nuclear and hydrogen skills training over the longer term.

3.4.11. The Sustainable Skills Innovation Centre is a proposed two storey c. 900 sqm dedicated training facility to meet the scale and range of demand for skilled construction workers generated by the TCBGC development. The centre will offer workshops (i.e. wood occupations, mechanical and electrical technology, flexible construction), an innovation space to utilise the latest construction techniques (i.e. Virtual Reality and Augmented Reality), a PC suite with computer-aided design software to support digital skills, and multiple classrooms, offices, and communal space. By its third year of operation, the centre will be able to support 150 full-time learns and 150 part-time learners.

3.4.12. In response to the growing student demand, and skills shortages in the automotive sector and renewable energy sector (especially in response to Sizewell C) a new Green Energy Skills Centre has been proposed at Colchester Institute's Colchester campus. The centre will be a c. 440 sqm workshop building that will focus on providing training in automotive engineering (including zero emission vehicles, autonomous logistics, green rapid transport systems, battery systems and storage) and clean energy engineering.

3.4.13. To estimate demand associated with growth to 2041, the approach set out within ECC's Developers' Guide to Infrastructure Contributions has been adopted. A pupil yield of 0.01 is applied to the emerging development trajectory for one bedroom homes, and a pupil yield factor of 0.04 for all other homes (which are assumed to be houses with two or more bedrooms, as a worst case scenario). This indicates total demand of 756 full time post-16 places will arise from growth in Colchester to 2041.

Costs, funding and delivery

3.4.14. Further education contributions are assessed by ECC on a case-by-case basis. If a demand has been identified, the cost per place for full-time post 16 places is £29,579 for a new facility and £28,127 for an extension[25].

3.4.15. The average of these two figures (£28,853) has been applied to further education pupils associated with the potential emerging allocations (estimated at 446 pupils). This gives an indicative cost of £12.9m.

3.4.16. Revenue funding for further education is mainly provided by the DfE, to fund institutions that provide study programmes for:

- Students aged 16 to 19;
- Students up to the age of 25 when they have an EHC Plan;

[24] Commissioned Strategy Outline Business Case - Essex County Council
[25] Essex County Council, (2025); Essex County Council Developers' Guide to Infrastructure Contributions.

- 14- to 16-year-olds who are directly enrolled at further education providers; and
- Home educated students of compulsory school age at further education providers.

Summary

3.4.17. There are three secondary schools with sixth forms in Colchester. Further education is also provided by one college and one sixth form college.

3.4.18. Colchester Institute is the largest further education provider in North Essex and offers both further and higher education opportunities. Three capital projects (expansion of the Energy Skills Centre at the Harwich campus, Sustainable Skills Innovation Centre in the TCBGC, and a Green Energy Skills Centre at the Colchester campus) are being progressed to expand provision for further education and adult learners.

3.4.19. Based on pupils yields within ECC guidance, it is estimated that Colchester's emerging development trajectory would create additional demand for 756 full time further education places to 2041.

3.4.20. Using a high level benchmarking approach, it is estimated that the cost of meeting demand associated with the potential emerging allocations would be £12.9m.

3.4.21. As well as funding from central and local government, developer contributions may be required to contribute towards capital projects. As of April 2025, revenue funding for further education is mainly provided by the DfE.

3.5. Special Education Needs and Disability (SEND)

Baseline

Current provision

3.5.1. There are 223,064 pupils attending schools in Essex, of which 39,442 have been identified with SEND. In the school year 2025/25, 9,975 students in Essex had an EHC plan (4.5%) and 29,467 students required SEN support (13.2%)[26]. EHC plans are designed to last until an individual is 25.

3.5.2. There are currently three special schools in Colchester as shown in Table 3-6 catering for different types of special need.

Table 3-6 Special schools in Colchester

Name	Age range	Specialism	Type	Students on roll as of May 2025
Kingswode Hoe School*	5-16	Other Difficulty/Disability, Autistic Spectrum Disorder, and Moderate Learning Difficulty	Academy special converter	153
Langham Oaks School*	10-16	Boys school – Social, Emotional, and Mental Health	Academy special sponsor led	73
Lexden Springs School	3-19	Autistic Spectrum Disorder, Severe Learning Difficulty and Profound and Multiple Learning Difficulty	Community special school	293

Source: Essex County Council, (2025); Essex Schools List – Academic Year 2024/25.

**Both schools are a part of the SEAX Trust, which is formed of five academies across Essex, each with their own specialism.*

[26] Department of Education, (2024); Age and Gender, by type of SEN provision and type of need - 2016 to 2024.

3.5.3. A recent SEN Capacity Assessment has been undertaken which shows both Lexden Springs and Kingswode Hoe are over their classroom capacity. The number of pupils in special schools has risen from 2,293 pupils in January 2015 to 3,714 pupils in May 2025.

3.5.4. Specialist provision that is delivered within mainstream schools is shown in Table 3-7.

Table 3-7 Specialist provision in Colchester

School name	Age range	Enhanced provision type
Cherry Tree Primary School	4 to 11	Speech, language and Communication
Lexden Primary School with Unit for Hearing Impaired Pupils and Nursery	3 to 11	Hearing Impairment
The Philip Morant Hearing Impaired Provision Secondary	11 to 18	Hearing Impairment
Braiswick Primary	4 to 11	Social, Emotional and Mental Health
Monkwick Junior	7 to 11	Social, Emotional and Mental Health

Source: Essex County Council, (2024); Essex Schools List – Academic Year 2023/24 Issued 19 April 2024.

3.5.5. ECC is currently consulting on the establishment of specialist provision at Hazelmere Infant School (4 to 7 years old) and St Michaels Primary School (4 to 11 years old) for children with severe learning difficulties.

3.5.6. ECC created a forecasting mechanism to predict the growth in the Education, Health and Care (EHC) Plan population in an area, along with the need and type of provision. The forecast shows that Colchester has seen 88% growth from 2018/19 (900 EHCPs) to 2024/25 (1,700 EHCPs). The forecast predicts that by 2028, Colchester's EHC plan population is to further increase by 35% to 2,300 pupils.

3.5.7. The increased numbers of children and young people with SEND in Essex schools has placed pressure on resources, and has led to continued need for ECC to commission school places from independent special schools. Currently, there are 72 pupils from Colchester travelling an average distance of 18 miles to an independent school. Travelling long distances to school can be very challenging for children and young people and can reduce the effectiveness of placements.

3.5.8. ECC's SEND Sufficiency Plan[27] identifies that Colchester is expected to have one of the higher rates of growth in EHC plans between 2021 and 2026 in Essex, with the largest increase expected for the secondary and post-16 age groups.

3.5.9. Demand has outgrown the capacity of SEND service provision in Essex and a greater proportion of high needs students are now in mainstream schools. Less than 1% of EHC plans were issued within the legal time limit of 20 weeks. The county is experiencing a greater number of parents using the appeal process to seek a place at an Essex special school[28].

Infrastructure requirements to 2041

3.5.10. ECC has a statutory responsibility to plan for and deliver special education needs and disabilities (SEND) facilities. Special needs may be met in a mainstream school, a specially resourced or enhanced provision within a mainstream school or in a special school depending upon the level of need.

3.5.11. If new development results in additional children in an area, then ECC will be required to provide a special need provision to 1.3% of the population. 2.1% of the population should be

[27] Essex County Council, (2023); Essex SEND Sufficiency Plan.
[28] Essex County Council, (2023); Essex SEND Sufficiency Plan.

able to have their SEND needs met in a mainstream school, as outlined in section 5.2 of the ECC Guide to Infrastructure Contributions[29].

3.5.12. ECC tested the development scenario set out within the emerging development trajectory, which assumes 19,137 qualifying dwellings to 2041 (this excludes one bedroom houses, please see section 3.1 for more detail).

3.5.13. ECC found that development to 2041 could result in SEN requirements for 201 pupils requiring an EHCP in mainstream school and a further 124 requiring a special school placement. This demand would be significant enough to warrant new provision within a mainstream school or the expansion of an SEN school within the location.

Costs, funding and delivery

3.5.14. At the time of writing and without further analysis, the costs of SEN provision to meet demand to 2041 is not known, however a high level cost estimate has been made based on cost benchmarks.

3.5.15. Developer contributions for special or alternative school places are set at four times the cost of mainstream places which is consistent with the space standards in Building Bulletin 104[30]. On this basis, a cost of £100,000 per place has been used.

3.5.16. This per pupil cost has been applied to the pupils associated with the emerging potential allocations. This gives an indicative cost of £18.6m[31].

3.5.17. The current SEND capital programme is nearing completion, but there is still unmet demand in Essex. The latest sufficiency assessment has highlighted the need to create a new SEND capital programme, maximise developer contributions, and utilise any future DfE special free school opportunities. ECC are also looking at savings that can be made elsewhere to invest in Essex schools to create more provision.

Summary

3.5.18. Demand has outstripped the capacity of SEND service provision in Essex and a greater proportion of high needs students are now in mainstream schools.

3.5.19. There are currently three special schools in Colchester. Colchester is expected to have one of the highest rates of growth in EHC plans issued of all Essex's lower tier authorities. ECC is anticipating that the largest increase will be expected for the secondary and post-16 age groups.

3.5.20. Special needs may be met in a mainstream school, a specially resourced or enhanced provision within a mainstream school or in a special school depending upon the level of need. ECC tested the development scenario set out within the emerging development trajectory, and found that development to 2041 could result in SEN requirements for 201 pupils requiring an EHCP in mainstream schools and a further 124 requiring a special school placement. This demand would be significant enough to warrant new provision within a mainstream school or the expansion of an SEN school within the location.

3.5.21. A high level cost estimate based on cost benchmarks indicates that special needs provision to meet demand associated with the emerging potential allocations would cost £18.6m.

3.5.22. The current SEND capital programme is nearing completion, but there is still unmet demand in Essex. The latest sufficiency assessment has highlighted the need to create a new SEND capital programme, maximise developer contributions, and utilise any future DfE special free school opportunities. ECC are also looking at savings that can be made elsewhere to invest in Essex schools to create more provision.

[29] Essex County Council, (2025); Essex County Council Developers' Guide to Infrastructure Contributions.
[30] Essex County Council, (2025); Essex County Council Developers' Guide to Infrastructure Contributions.
[31] Demand associated with the emerging potential allocations only is estimated to be 58% of total demand, reflecting the proportion of the homes within the emerging development trajectory which emerging potential allocations. Existing allocations and existing commitments have not been included in the cost and funding gap estimate because they are subject to extant s106 and Local Plan allocations.

3.6. Higher education

Baseline

Current provision

3.6.1. There is one university in Colchester, the University of Essex. The University of Essex has a total student population of approximately 19,090 across its three campuses in Essex, however there is no precise breakdown of student numbers between the campuses[32]. The profile of the student population is 5% postgraduate research, 30% postgraduate taught, and 65% undergraduate.

3.6.2. Given the large catchment areas associated with universities and their specialisation into particular fields of study, it is likely that a large proportion of the university's student base will come from outside the local authority area. Figures from the 2021 student register[33] show that 12.9% of students are from the European Union, and 21.5% are from overseas. It is also likely that many residents of Colchester will choose to attend universities outside of the local authority area.

3.6.3. 2,688 Colchester residents started a further education or higher education course and 38 started a higher-level apprenticeship in September 2023[34].

3.6.4. In terms of domestic students, the number of 18-year-olds who choose to attend university has decreased nationally in recent years[35]. Furthermore, in 2023 the University of Essex reported that their intake of home undergraduate students fell for the third year in a row[36]. Despite this the University is still confident that they will reach their target to grow the University to 1,000 researchers and 20,000 students by 2028. Partnerships have been created with regional international offices and the school network to encourage students to attend.

Infrastructure requirements to 2041

3.6.5. Major infrastructure projects underway in 2022-23 include[37] Smart Working at Essex (SWAE) – this £7.9 million project will improve digital infrastructure across the University. Phase 1 is complete; Phase 2 is now underway and will cost £1.3 million.

3.6.6. The University of Essex will be opening a new Centre for Coastal Communities as part of the Clacton Civic Quarter redevelopment. A £20 million Levelling Up Fund grant has been awarded to ECC and Tendring District Council to transform the existing Clacton Library site to deliver a building that will host a brand-new library, Adult Community Learning centre, local registration services, and the new Centre for Coastal Communities. The Centre will form part of the Institute of Public Health and Wellbeing which was established by the University in 2022.

3.6.7. The TCBGC DPD[38] sets out details of higher education facilities which are anticipated to be required as part of the garden community proposals:

- A Sports and Leisure Park is proposed that will deliver a sports hub for the local community, as well as expand sports facilities for the University of Essex.
- Employment land is allocated for the expansion of the University of Essex Knowledge Gateway[39] to the north of the A133.

[32] University of Essex, (2023); Economic Impact Report 2022-23.
[33] University of Essex, (2021); Total number of students registered on Essex courses in 2021.
[34] Please note data received from ECC combines further education and higher education and data is not separated out by age.
[35] House of Commons Library, (2023); Higher education student numbers.
[36] University of Essex, (2023); Economic Impact Report 2022-23.
[37] University of Essex, (2023); Financial Statement 2022-23.
[38] Colchester City Council, Essex County Council, Tendring District Council, (2023); Tendring Colchester Borders Garden Community: Development Plan Document.
[39] The Knowledge Gateway Innovation Centre at the University of Essex is a dynamic hub designed to support innovators, entrepreneurs, and businesses. Knowledge Gateway | University of Essex Accessed January 2025.

- Student accommodation will be encouraged in accessible locations with the South of the TCBGC development, along with good sustainable travel links to the University of Essex.
- The expansion of the Rapid Transit System will connect the University of Essex to the TCBGC, City of Colchester, Colchester General Hospital, Colchester railway stations, and Colchester Sports Park.

Costs, funding and delivery

3.6.8. Three higher education projects are listed in the Project Schedule; costs for only one of these projects is known (Smart Working at Essex Phase 2, which is assumed to be funded).

3.6.9. The University of Essex is in a strong financial position to invest in future land and buildings, as well as high quality equipment to meet future requirements. The University will be the lead funder of any expansion of facilities to accommodate greater demand.

3.6.10. In 2022/23, the primary source of income for the University of Essex is tuition fees which totalled £196.7 million, with £107.7 million raised from international fees[40]. The second highest source of income was classified under 'other income' which include approximately £42.8 million from commercial services income.

Summary

3.6.11. There is one university in the Colchester, the University of Essex. On account of the large catchment areas associated with universities, and the high international student population at the University of Essex, it can be assumed that a large number of students come from outside of Colchester.

3.6.12. The University of Essex plans to increase its intake of students to approximately 20,000 students and 1,000 researchers, as well as establish two new departments or disciplines to meet the University's needs. Despite numbers of domestic and EU undergraduates declining, the University is confident it can expand its operation through partnering with international organisations and promoting postgraduate courses.

3.6.13. Three infrastructure projects for the University have been identified. The largest projects identified include the opening of a new Centre for Coastal Communities as part of the Clacton Civic Quarter Development and the land allocation in the TCBGC DPD for the potential expansion of the Knowledge Gateway, sport facilities, and student accommodation.

3.6.14. The University will be the lead funder of any expansion of facilities to accommodate greater demand.

3.7. Adult education

Baseline

Current provision

3.7.1. As set out in Section 3.4, 2,688 Colchester residents started a further education or higher education course and 209 started an apprenticeship in September 2023[41]. Common courses represented in these figures include functional skills qualifications. A proportion of further education/higher education/apprenticeship starts will be adult learners; however, a breakdown of adult learners relative to younger learners in Colchester is not currently available.

3.7.2. There are two adult education colleges in Colchester: Adult Community Learning (ACL) Essex and Colchester Institute. The location of these facilities within Colchester city centre is shown in Figure 3-4.

[40] University of Essex, (2023); Financial Statement 2022-23.
[41] Please note data received from ECC combines further education and higher education and data is not separated out by age.

3.7.3. ACL Essex is linked to ECC and provides apprenticeship programmes that meet the needs of local employers, vocational courses, and professional qualifications. Currently, it has eight adult community learning centres across Essex. The latest Ofsted report from December 2023 states that 2,159 adult learners were studying accredited courses, 1,030 adult learners were studying community learning courses, and 168 adult learners were enrolled in apprentices[42].

3.7.4. Colchester Institute is formed of three campuses: two large sites in Colchester and Braintree, as well as a smaller engineering training facility in Harwich. It also has four 'Adult Skills Centres' for unemployed adults located in Colchester (located at Colchester Institute Campus), Braintree, Clacton-on-Sea, and Dovercourt. The 2022/23 cohort was formed of 33% adult learners. This includes 1,896 learners on adult learning programmes and 438 learners on higher education courses. A breakdown of adult learners on apprenticeships was not available[43].

Infrastructure requirements to 2041

3.7.5. The ACL Essex Strategic Plan[44] outlines a commitment to providing well equipped learning spaces. Projects in the pipeline include the Clacton Civic Quarter redevelopment led by ECC and Tendring District Council which is proposed to commence in Autumn/Winter 2025. ACL Essex will have a co-located centre alongside other community and educational facilities.

3.7.6. Three capital projects are being progressed at the Colchester Institute to provide construction skills, as well as modern green and digital skills. These projects – the expansion of the Energy Skills Centre at the Harwich campus, Sustainable Skills Innovation Centre in the TCBGC, and a Green Energy Skills Centre at the Colchester campus – are described fully in the Further Education chapter as it is assumed that both younger learners (aged 16-18) and adult learners will benefit from theire new facilities.

Costs, funding and delivery

3.7.7. For Colchester Institute's three proposed FBC, there is anticipated to be the following funding gaps:

- £3.6 million for the expansion of the Energy Skills Centre (Harwich campus);
- £5.0 million for the Sustainable Skills Innovation Centre (TCBGC);
- £2.5 million for the Green Energy Skills Centre at the Colchester Campus (Colchester campus).

3.7.8. The funding sources and delivery responsibility for these three projects are yet to be decided.

3.7.9. The Clacton Civic Quarter Redevelopment (which will include an Adult Learning Centre) has received funding from the Levelling Up Fund and so it is assumed that this project is funded.

3.7.10. ACL Essex receives the majority of its funding from the DfE to deliver courses to Essex residents. The DfE has a defined Adult Education Budget which is used to fund programmes that engage adults and provide the skills and learning they need to progress into work or equip themselves with an apprenticeship or other training. Furthermore, some learners pay fees towards the costs of their courses. The latest ACL Strategy states that the commercial goals of the college are to make best use of funding, increase fee income, and generate alternative sources of funding[45].

3.7.11. Colchester Institute receives the majority of its funding in Government recurrent and specific grants (85% of total income). However, Colchester Institute is currently running at a loss due to challenging external factors, although the deficit has decreased from last year and

[42] Ofsted, (2023); Inspection of Essex County Council.
[43] Colchester Institute, (2023); Annual Report and Financial Statement.
[44] Adult Community Learning (ACL) Essex, (2022); Strategic Plan 2022-2025.
[45] Adult Community Learning, (2022); Strategic Plan 2022-2025.

investments in infrastructure will reduce energy costs in the long-term. A key concern is the reduction in higher education participation which has reduced fee revenue.

Summary

3.7.12. There are two adult education colleges in Colchester: ACL Essex and Colchester Institute.

3.7.13. Adult education colleges have a key focus on basic skills such as Basic English, Maths and ESOL to enable individuals to upskill or enter the workplace. However, adult education provision and the types of courses made available are also shaped by the demand arising from the local economy and community. The TCBGC, Freeports East, and a variety of renewable energy projects in Essex are increasing demand for construction, green, and digital skills.

3.7.14. Population and housing growth is driving the demand for construction skills, as well as modern green and digital skills to adapt a changing sector. To support this growth, it is anticipated that three Colchester Institute Projects will move to FBC in early 2025: expansion of the Energy Skills Centre at the Harwich campus, Sustainable Skills Innovation Centre in the TCBGC, and a Green Energy Skills Centre at the Colchester campus. These three projects have combined costs of £11.1 million; at present the funding sources and delivery responsibility for these projects remains to be confirmed.

3.7.15. The Clacton Civic Quarter Redevelopment will include an Adult Learning Centre and this is recorded as a fourth adult learning project within the Project Schedule. This project will be funded by the Levelling Up Fund.

Colchester Institute is currently running at a loss due to challenging external factors, although the deficit has decreased from last year and investments in infrastructure will reduce energy costs in the long-term. A key concern is the reduction in higher education participation which has reduced fee revenue.

3.8. Indoor and outdoor sports and leisure facilities

Baseline

Current provision

3.8.1. The Playing Pitch and Outdoor Sport Strategy (PPOSS) Assessment Report identified the following outdoor sports and leisure provision in Colchester: one athletics track, four golf facilities, one dedicated cycling track in addition to numerous trails and routes, and four MUGAs. These facilities are shown in Table 3-8. These facilities are primarily located in the Colchester urban area and its immediate surroundings.

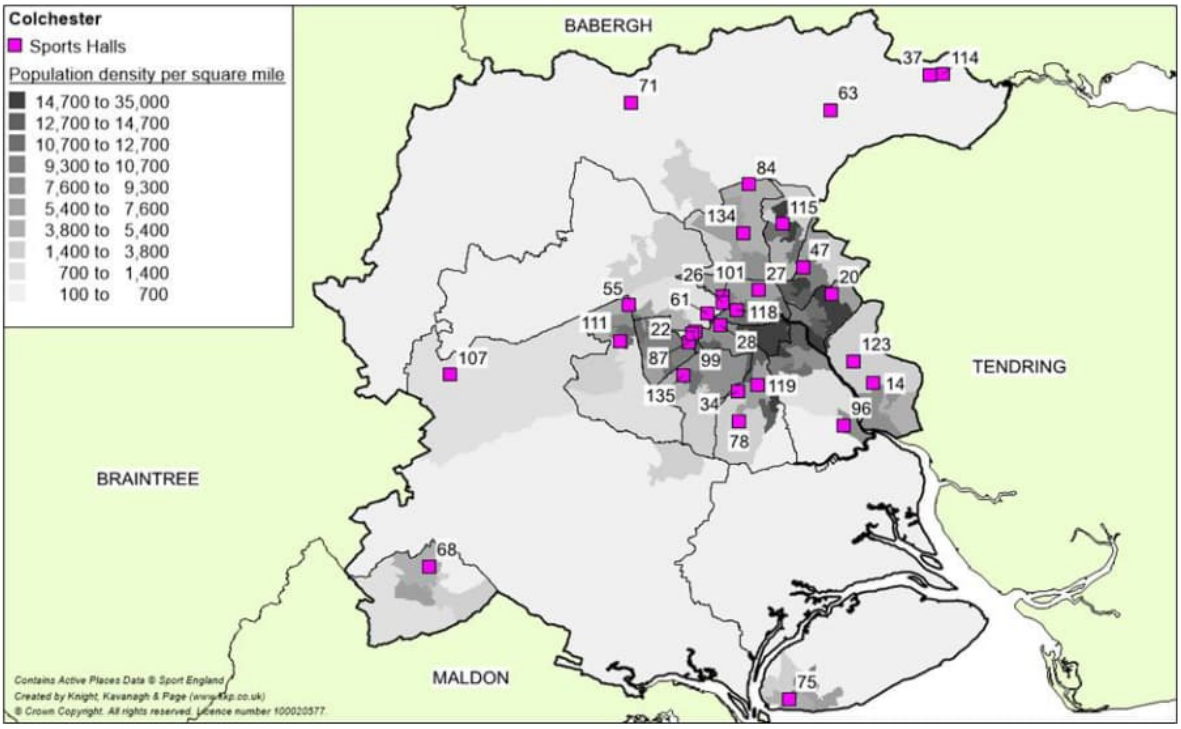
Table 3-8 Outdoor sports and leisure facilities in Colchester

Outdoor facility type	Asset
Athletics	Colchester Garrison Athletics Stadium
Golf	Birch Grove Golf Club
	Colchester Golf Club
	Tiptree Golf Driving Range
	Lexden Wood Golf Club
Cycling	Colchester Northern Gateway Sports Park
Multi-Use Games Areas (MUGAs)	Old Heath Recreation Ground
	Pondfield Open Space
	Magnolia Fields
	ADI Zone / Monkwick Open Space

Source: Knight, Kavanagh and Page/Colchester City Council, (2023); Playing Pitch and Outdoor Sport Strategy.

3.8.2. Additionally, CCC commissioned an Indoor and Built Sports Facilities Needs Assessment (IBSFNA)[46]. This identified 46 sports halls comprising a total of 106 badminton courts in Colchester, of which 35 are available for community use. The locations of all sports hall sites are shown in Figure 3-5. These are primarily located in the urban area of Colchester where the IBSFNA finds there to be a degree of unmet demand.

Figure 3-5 Sports Halls in Colchester

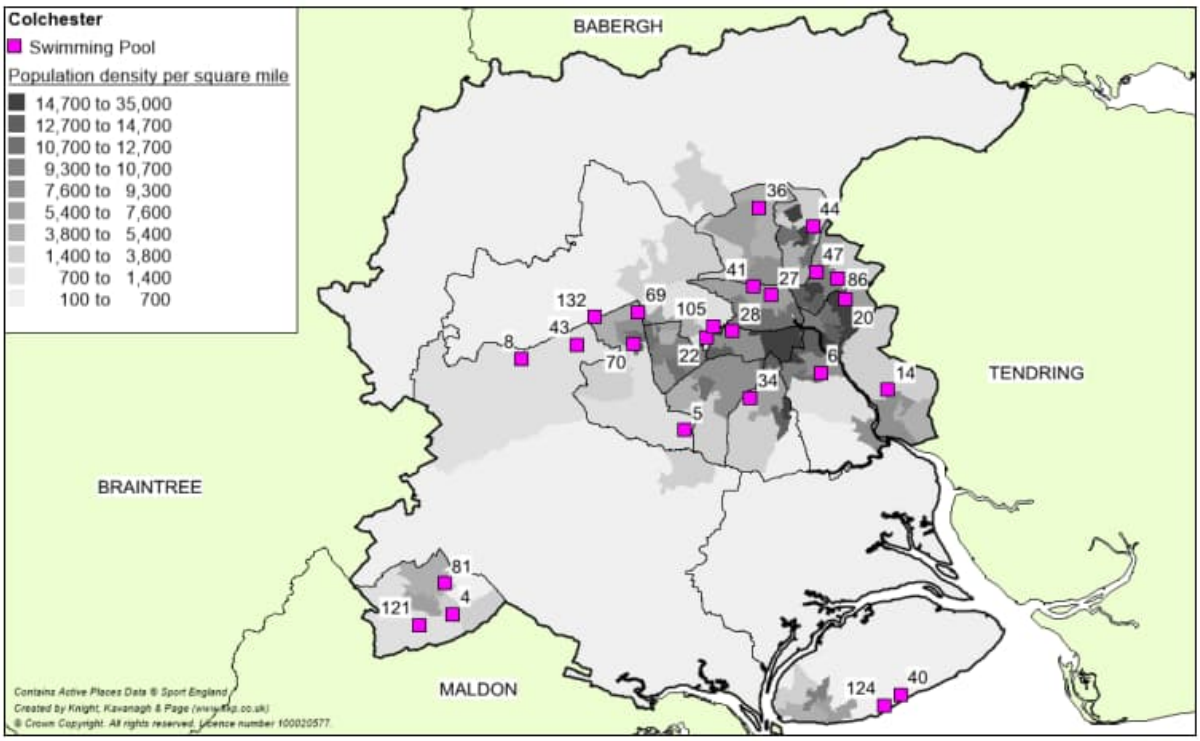


Source: Knight, Kavanagh and Page/Colchester City Council, (2023); Indoor and Built Sports Facilities Needs Assessment.

3.8.3. There are 28 swimming pools at 24 sites across Colchester identified by the IBSFNA, as shown in Figure 3-6. These swimming pools have varying accessibility. Colchester Leisure World is the only community pay and play swimming pool with access for all Colchester residents. Some other facilities offer some form of availability for community use, as follows: Colchester Leisure World (pay and play), Bannatyne Health Club Kingsford Park (registered membership), Bannatyne Heath Club Colchester (registered membership), Corporal Budd VC Gymnasium (sports club and community association use which can be withdrawn at short notice), David Lloyd Colchester (registered membership) and Waldegrave Holiday Park (unsecured pay and play). The IBSFNA states that there are potential aspirations to review the role and condition of Colchester Leisure World and whether it will continue to meet community needs into the future. The IBSFNA recommends that provision of new facilities in the east of Colchester would most effectively meet the most unmet demand, and suggests that the TCBGC will need to provide a swimming pool facility.

[46] Knight, Kavanagh and Page/Colchester City Council, (2023); Indoor and Built Sports Facilities Needs Assessment.

Figure 3-6 Swimming pools in Colchester



Source: Knight, Kavanagh and Page/Colchester City Council, (2023); Indoor and Built Sports Facilities Needs Assessment.

3.8.4. A summary of identified current and future needs with respect to indoor and outdoor sports facilities is shown below. It can be seen that a key focus for additional new provision will be swimming pool facilities.

Table 3-9 Current and future picture for indoor and outdoor facilities

Facility type	Current picture	Future picture
Athletics	No need for additional provision	Balance formal (club) and informal (recreational) access to facility
Cycling	Road cycling dominates demand	Focus on general infrastructure to accommodate (latent) demand
Golf	Reasonable supply	Promote increased membership
MUGAs	Reasonably well serviced in urban area, limited service for remaining analysis areas based on recommended accessibility catchment areas	Maintain good quality provision
Swimming pools	Lack of spare capacity for water space, requirement for additional provision and refurbishment of existing facilities	Additional provision required
Sports halls	Good supply with spare capacity in some locations, some unmet demand particularly to east of Colchester urban area	Plan for future provision jointly with neighbours for TCBGC

Source: Knight, Kavanagh and Page/Colchester City Council, (2023); Playing Pitch and Outdoor Sport Strategy: Strategy and Action Plan. Knight, Kavanagh and Page/Colchester City Council, (2023); Indoor and Built Sports Facilities Needs Assessment.

Infrastructure requirements to 2041

3.8.5. As outlined in the TCBGC Infrastructure, Delivery, Phasing and Funding document[47], it is proposed that a Sports and Leisure Park will be provided as part of Phase 1 of the TCBGC

[47] Tendring Colchester Borders Garden Community Development Plan Document, (2023); Infrastructure Delivery, Phasing and Funding Plan.

(between 2025/26 to 2031/32). Based on The Sports Facilities Calculator, it is estimated that the TCBGC will generate demand for 4.5 courts and 3.3 swimming lanes[48]. Thus, it is assumed that the provision of a combined Sports and Leisure Park will serve the demands of TCBGC population growth and additional needs of the University of Essex. The facility will host a combination of health and fitness and swimming facilities which will be more attractive to its users and will give the facility a competitive edge.

3.8.6. The Sport England Active Places Power Sport Facility Calculator[49] is a tool that can be used to help estimate the additional demand for key community sports facilities created by new development. It indicates that a population increase of 28,399 persons in Colchester by 2041[50] would generate a demand for an additional 1,843 visits per week in the peak period (VPWPP) to swimming pools with an additional 2,236 VPWPP to sports halls. Table 3-10 outlines the estimated facilities requirements and costs.

Table 3-10 Indoor sports facility requirements and costs

Swimming Pools		Sports Halls	
Lanes	5.70	Courts	7.59
Pools	1.43	Halls	1.90
Visits per week in peak period	1,843	Visits per week in peak period	2,236
Cost	£6,528,175	Cost	£5,693,384

Source: Sport England (2024). Active Places Power Sports Facilities Calculator. Contains Data © Sport England

3.8.7. The Sport Facility Calculator also indicates that a population increase of 28,399 by 2041 would generate a demand for an additional 700 VPWPP to artificial grass pitches with an additional 591 VPWPP to outdoor tennis courts. The estimated facilities requirements and costs are set out below.

Table 3-11 Outdoor sports facility requirements and costs

Artificial Grass Pitches		Outdoor Tennis Courts	
Pitches	0.95	Courts	3.79
VPWPP	700	VPWPP	591
Cost if 3G	£1,133,405	Cost	£429,654

Source: Sports England, Sport England Active Places Power Sport Facility Calculator. Contains Data © Sport England.

3.8.8. Demand and costs for MUGAs are covered in the analysis of play space requirements within Chapter 3.12.

Costs, funding and delivery

3.8.9. As set out above, the Sport England Sport Facilities Calculator indicates that meeting the requirements of the additional population to 2041 would generate a total cost of £13,784,618 million for indoor and outdoor sports and leisure facilities. This cost is shown in the Project Schedule.

3.8.10. The Sports and Leisure Park to be provided as part of Phase 1 of the TCBGC (between 2025/26 to 2031/32) is also listed in the Project Schedule; currently costs are unknown and it assumed the facility is unfunded.

3.8.11. Sport England recommends that developer contributions should be sought in order to supplement investment from the local authority in indoor and outdoor sports facility

[48] Sports England, (2023); The Sports Facilities Calculator.
[49] Sport England (2024). Active Places Power Sports Facilities Calculator. Contains Data © Sport England.
[50] This additional population is estimated by multiplying the number of homes associated with potential emerging allocations and windfall dwellings (12,070) by the average household size in Colchester as per the Census 2021 (2.35 people per household).

provision[51]. Within the Project Schedule it is currently assumed that the sports facilities required to 2041 are not funded. Delivery is likely to be by developers, the local authority, and the private sector.

3.8.12. Proposals for new facilities should be cognisant of the existing areas of surplus and deficit identified by the PPOSS or IBSFNA so that either pooled funds or on-site provision are pursued to effectively address need in appropriately accessible locations.

Summary

3.8.13. There is a good supply of indoor and outdoor sports and leisure facilities to meet existing demand and likely new demand as the population of Colchester grows. There is, however, unmet demand for swimming pool facilities, and a degree of unmet demand for sports halls in the urban area as well as a need for additional MUGAs to meet informal demand in some locations. More rural, peripheral parts of the local authority area are less well-served and experience gaps in provision.

3.8.14. As outlined in the TCBGC Infrastructure, Delivery, Phasing and Funding document, it is proposed that a Sports and Leisure Park is provided as part of Phase 1 of the TCBGC (between 2025/26 to 2031/32) to serve the TCBGC population growth and additional needs of the University of Essex. The facility will host a combination of health and fitness and swimming facilities.

3.8.15. The Sports England Active Places Calculator indicates that the new population arising from the potential emerging allocations to 2041 would require 5.70 swimming pool lanes and 7.59 sports courts at a cost of £12.22m. It would also generate demand for 0.95 aritifical grass pitches and 3.79 tennis courts at a cost of £1.56m.

3.8.16. Future facilities are currently assumed to be unfunded. Where significant development is planned, it is expected that developer contributions will be sought to supplement investment from the local authority in indoor and outdoor sports facility provision[52].

3.9. Playing pitches

Baseline

Current provision

3.9.1. The Playing Pitch and Outdoor Sport Strategy Assessment Report[53] (PPOSS) identified the following playing pitch provision in Colchester: 196 football pitches, 20 3G pitches, 43 rugby union pitches, three hockey pitches, 30 cricket facilities, 122 tennis courts, 63 netball courts, and 10 bowling greens.

3.9.2. The Playing Pitch and Outdoor Sport Strategy Action Plan summarises the current and future supply/demand balance for playing pitches in terms of match equivalent sessions. The current and future supply/demand balance varies across types of facility and by geography; however it can be seen that:

- There is a current and future shortfall of adult football grass pitches in all analysis areas (Central/East, North, South and West);
- There is a current and future shortfall of football 3G pitches in three out of four analysis areas;
- There is a current and future adequate supply of cricket facilities in the Central/East analysis area, but provision in the remaining three analysis areas is at capacity or there is a shortfall;

[51] Sport England, (2018); CIL and Planning Obligations Advice Note: Meeting the need for sporting provision that may be generated from new development.
[52] Sport England, (2018); CIL and Planning Obligations Advice Note: Meeting the need for sporting provision that may be generated from new development.
[53] Knight, Kavanagh and Page/Colchester City Council, (2023); Playing Pitch and Outdoor Sport Strategy: Assessment Report.

- There is an adequate future supply of hockey and netball pitches; and
- There are likely to be some future potential shortfalls in supply and over use of facilities with regard to tennis and bowls respectively.

Infrastructure requirements to 2041

3.9.3. The PPOSS describes range of stated ambitions and proposals for expansion or refurbishment of existing facilities, as well as installation of new playing pitches, at the following locations:

- Poors Land: planned conversion of mini 7v7 football pitch to youth 9v9 football pitch;
- Northern Gateway Sports Park: drainage solutions to deal with poor ground conditions; three football pitches to be installed;
- Mile End Sports Ground: additional two adult football pitches to be installed;
- Trinity Secondary School: installation of grass football pitches;
- Broad Lane Sports Ground: potential site for installation of new 3G pitch;
- Shrub End Sports Ground: potential site for installation of new 3G pitch;
- The Glebe (West Mersea): potential site for installation of new 3G pitch;
- Langham Recreation Ground: cricket square being re-installed;
- Mile End Recreation Ground: third square to be signed off by CCC, potential capacity for fourth square;
- Langham Tennis Club: ambitions to add a third court;
- Lexden Hill Lawn Tennis Club: ambition to install a padel tennis court;
- Trinity Secondary School: tennis courts to be installed; and
- Trinity Secondary School: netball courts to be installed.

3.9.4. As outlined in the TCBGC Infrastructure, Delivery, Phasing and Funding document, the Strategic Masterplan for the TCBGC has calculated the overall requirement for pitches to be around 21 hectares, with provision suggested across a number of hubs, including a combined facility south of the A133 as part of the proposed 'Sports and Leisure Park'. A need has been identified for 16-17 grass football pitches, one senior rugby union pitch, one cricket square and one full size third generation (3G) pitch.

3.9.5. Fields in Trust guidance[54] indicates a requirement of 1.2ha grass pitch provision per 1,000 population. Accordingly, a population increase of 28,399 persons in Colchester by 2041 would generate a demand for an additional 34.1 ha of grass pitches, with associated costs of £5.7m[55]. Table 3-12 outlines the estimated facilities requirements and costs. Requirements for artificial pitches are covered in under the heading of outdoor sports within the previous chapter of this report.

Table 3-12 Grass pitch and cricket square requirements and costs

Grass pitch provision	
Recommended ha per 1,000	1.2 ha
Demand (ha) to 2041	34.1 ha
£ per ha grass pitch (average)	£16,621
Cost	£5,664,108

Note sums may not add due to rounding.

Source: Fields in Trust, (2020); Guidance for Outdoor Sport and Play: England.; Sport England, (2023); 2nd quarter 2023 facility cost updates (see also Stage 1 and 2 report Appx B).

[54] Fields in Trust, (2020); Guidance for Outdoor Sport and Play.
[55] Cost per square metre of grass pitch is taken as £16.60; this is an average from based on Sport England, (2023); 2nd quarter 2023 facility cost updates (see also Stage 1 and 2 report Appx B).

Costs, funding and delivery

3.9.6. As noted above, the PPOSS identifies a number of proposed playing pitch projects to meet future demand but there is at present no evidence that these projects are committed or funded. These proposals have been recorded within the Project Schedule as a single entry with unknown costs and funding status.

3.9.7. As set out above, it is estimated meeting the requirements of the additional population to 2041 would generate a cost of £5.7 million for grass playing pitches. This high level, Colchester-wide estimate is recorded within the Project Schedule. The PPOSS identifies existing areas of surplus and deficit and will thus help ensure that where new provision is proposed, duplication of facilities is avoided, and overuse is not exacerbated.

3.9.8. Pitches within the TCBGC are also included within the Project Schedule; however, currently costs are unknown and it assumed the facilities are unfunded.

3.9.9. Sport England recommends that developer contributions should be sought in order to supplement investment from the local authority in playing pitch provision[56]. Where significant developments are planned, developers would be expected to provide or contribute towards the installation of new playing pitch facilities to meet arising demand. For the purposes of the Project Schedule, the assumption is that required playing pitch projects are currently unfunded.

Summary

3.9.10. The following playing pitch provision in Colchester has been identified: 196 football pitches, 20 3G pitches, 43 rugby union pitches, three hockey pitches, 30 cricket facilities, 122 tennis courts, 63 netball courts, and 10 bowling greens.

3.9.11. The majority of these facilities are spatially concentrated in and around the urban area of Colchester in areas of higher population density. There is additional provision which is not available for community use in private and educational settings.

3.9.12. The PPOSS Action Plan assesses current and future deficits and surplus provision of playing pitches. It finds that the current and future supply/demand balance varies across types of facility and by geography; however it can be seen that there is a current and future shortfall of adult football grass pitches in all analysis areas; there is a current and future shortfall of football 3G pitches in three out of four analysis areas; and there are some future potential shortfalls in supply and over use of facilities with regard to tennis and bowls respectively.

3.9.13. The Strategic Masterplan for the TCBGC has calculated the overall requirement for pitches to be around 21 hectares, with provision suggested across a number of hubs, including a combined facility south of the A133 as part of the proposed 'Sports and Leisure Park'.

3.9.14. The PPOSS describes range of stated ambitions and proposals for expansion or refurbishment of existing facilities, as well as installation of new playing pitches. However there is at present no evidence that these projects are committed or funded. These proposals have been recorded within the Project Schedule as a single entry.

3.9.15. Based on Fields in Trust Guidance, the population associated with the potential emerging allocations in Colchester could generate demand for 34.1ha grass pitches. Drawing on Sports England benchmarks, the costs of provision are estimated at £5.7m (also assumed to be unfunded at this stage).

3.9.16. Sport England recommends that developer contributions should be sought in order to supplement investment from the local authority in playing pitch provision. The future delivery of new facilities or upgraded or expanded existing facilities should be cognisant of the assessments and recommendations set out in the PPOSS.

[56] Sport England, (2018); CIL and Planning Obligations Advice Note: Meeting the need for sporting provision that may be generated from new development.

3.10. Open spaces

Baseline

Current provision

3.10.1. There are 440 open spaces[57] in Colchester comprising 954 hectares of land use coverage. A breakdown of the number of sites and total land area by open space typology is shown in Table 3-13. Natural and semi-natural greenspace contribute the highest number of sites, while amenity greenspace contributes the largest land area.

Table 3-13 Open spaces in Colchester

Typology	Primary purpose	Number of sites	Total amount (hectares)
Parks and gardens	Parks and formal gardens, open to the public. Accessible, high-quality opportunities for informal recreation and community events.	3	49
Natural and semi-natural greenspace	Supports wildlife conservation, biodiversity and environmental education and awareness.	62	604
Amenity greenspace	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.	134	267
Provision for children and young people	Areas designed primarily for play and social interaction involving children and young people.	118	6
Allotments	Opportunities to grow own produce. Added benefits include the long term provision of sustainable living, health and social inclusion.	23	28
Total	**-**	**440**	**954**

Source: Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.

3.10.2. Sufficiency of provision of open space can be assessed in terms of benchmark space standards within an appropriate catchment area from populations. This assessment has been conducted with respect to analysis sub-areas in Colchester: Central/East, North, South and West. A summary of the current provision against the benchmark standard is shown for each of the open space typologies in Table 3-14 and Table 3-15.

3.10.3. The Central/East sub-area (aligning within the Colchester urban area) has good provision of all open space typologies. All other areas of the local authority area have a reported deficit in parks and gardens. The South and West analysis sub-areas overall have a deficit of open spaces given their respective combined provision levels are below the appropriate standard. The West analysis sub-area has a deficit of 1.9 hectares per 1,000 population.

Table 3-14 Open space provision against standards

Analysis area	Parks and garden		Natural and semi-natural		Amenity greenspace		Combined	
	ha	+/-	ha	+/-	ha	+/-	ha	+/-
Standard (hectares per 1,000 population)								
	0.25	-	3.07	-	1.35	-	4.67	-
Current provision (hectares per 1,000 population)								
Central/East	0.34	+0.09	3.27	+0.20	1.32	+0.03	4.93	+0.26
North	-	-0.25	2.95	-0.12	2.06	+0.71	5.01	+0.34
South	-	-0.25	3.10	+0.03	0.93	-0.42	4.03	-0.64

[57] Open spaces assessed by the Open Space Report omitted those less than 0.2 hectares in size which did not provide a specific function for users.

Analysis area	Parks and garden		Natural and semi-natural		Amenity greenspace		Combined	
	ha	+/-	ha	+/-	ha	+/-	ha	+/-
West	-	-0.25	1.22	-1.85	1.55	+0.20	2.77	-1.90

Source: Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.

Table 3-15 Open space provision against standards (continued)

Analysis area	Allotments		Play provision	
	ha	+/-	ha	+/-
Standard (hectares per 1,000 population)				
	0.14	-	0.03	-
Current provision (hectares per 1,000 population)				
Central/East	0.15	+0.01	0.03	Level
North	0.16	+0.02	0.06	+0.03
South	0.11	-0.03	0.03	Level
West	0.11	-0.03	0.04	+0.01

Source: Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.

3.10.1. The types of open space which are most frequented by Colchester's existing residents are natural and semi-natural greenspace, coasts and riversides, country parks, and local parks or gardens. According to existing residents, priority improvement measures for Colchester's open spaces include introducing more wildlife and promoting habitats.

Infrastructure requirements to 2041

3.10.1. Existing Local Plan policy[58] requires new development to provide 10% of the total gross site area as local open space, with large sites of 5 ha or more expected to provide one strategic area of open space within the site (noting the value of large contiguous spaces as well as doorstep smaller spaces). According to the Provision of Open Space, Sport and Recreational Facilities SPD[59] adopted in 2006, new development increases demand for open space and this must be mitigated by provision of open space or contribution to ensure the development is acceptable and does not exacerbate existing constraints in provision.

3.10.2. Many of the allocated sites within the existing Local Plan make provision for contributions of open space of varying scales, including at those sites below (noting that some of these may have been implemented):

- Land at and adjacent to the Rugby Club, North Colchester;
- North Station Special Policy Area, Colchester;
- Land at Braiswick;
- ABRO Site, Colchester;
- East Colchester/Hythe Special Policy Area, Colchester;
- Site off Barrington and Bourne Roads, Colchester;
- Stanway Residential Sites;
- Land at Chitts Hill, Colchester;
- Land off Dyers Road including Fiveways Fruit Farm, Stanway;
- Open Space East of Tollgate Road, Stanway;

[58] Colchester City Council, (2022); Colchester City Council Local Plan 2017 – 2033: Section 2. Policy DM18: Provision of Public Open Space.
[59] Colchester Borough Council, (2006); Provision of Open Space, Sport and Recreational Facilities Supplementary Planning Document.

- Land between Church Lane and Maldon Road including Stanway Hall Farm and Bellhouse Pit, Stanway;
- Land to the North of London Road, Stanway;
- Land off Greenfield Drive, Great Tey;
- Policy SS10: Layer de la Haye;
- Dawes Lane, West Mersea;
- Brierley Paddocks, West Mersea;
- Rowhedge;
- Barbrook Lane, Tiptree; and
- Policy SS16: Wivenhoe.

3.10.3. The Open Space Report recommends that sites serving catchment gaps should be prioritised for enhancement; applicable sites are shown in Table 3-16. These sites therefore represent potential targets for investment towards improvement and enhancement. Those sites which are highlighted are deemed to be of low quality/value and therefore should be prioritised further for improvement and enhancement.

Table 3-16 Open space sites serving catchment gaps which should be prioritised for enhancement

Site name	Typology	Helps to serve provision gap in:
Abbey Field	Amenity	Parks
Berechurch Road	Amenity	Parks
Camulodunum Way	Amenity	Natural
Cassino Road	Amenity	Natural
Catherine Hunt Way	Amenity	Natural
Chesthunt Field	Natural	Parks
Cymbeline Meadows	Natural	Amenity
Elmwood Avenue	Amenity	Natural
Glebe View Sports Ground AGS	Amenity	Parks
High Woods Country Park	Natural	Parks
Hilly Fields Nature Reserve	Natural	Amenity
King George V Playing Fields	Amenity	Parks
Layer Road	Amenity	Natural
Lexden King George Field	Amenity	Parks
Lilianna Road	Amenity	Parks
Mile End Recreation Ground	Amenity	Parks
Old Heath Recreation Ground	Amenity	Parks
Reed Hall Avenue	Amenity	Natural
Saint John's Playing Field	Amenity	Parks
Sandmartin Crescent	Amenity	Parks
Spring Lane Park	Amenity	Parks
West Mersea Park	Amenity	Parks
Westlands Country Park	Natural	Parks

Source: Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report. Table 10.4.1. Table 10.4.2.

3.10.4. As outlined in the TCBGC Infrastructure, Delivery, Phasing and Funding document, the TCBGC will create a multi-functional network of primary green spaces and corridors. This

will include creation of the Salary Brook Country Park as part of Phase 1, green corridors to distinguish between the three neighbourhoods, and the provision of sports and leisure facilities. Local open spaces and facilities will be distributed appropriately across the development, to ensure that provision remains in sync with housing delivery.

3.10.5. Applying the Open Space Report standards to the potential emerging allocations to 2041, a population increase of 28,399 persons in Colchester by 2041[60] would generate demand for a total of 136.60 ha of open space. Table 3-17 outlines the estimated demand for each open space type.

Table 3-17 Open space requirements to 2041

Open space typology	Open Space report standards (ha per 1,000 population)	Demand area (ha) to 2041
Parks and gardens	0.25	**7.10**
Natural and semi-natural greenspace	3.07	**87.18**
Amenity greenspace	1.35	**38.34**
Allotments	0.14	**3.98**
		136.60

Source: Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.

Costs, funding and delivery

3.10.6. In total, 19 allocated sites within the existing Local Plan make provision for open spaces of varying scales. These proposals have been recorded within the Project Schedule as a single entry with unknown costs and funding status though it is likely that costs and delivery will be via the developer.

3.10.7. In addition, the PPOSS has identified 23 additional open sites serving catchment gaps that would benefit from enhancements. The proposals relating to these sites are included within the Project Schedule as a single entry; they are currently assumed to be uncommitted and unfunded.

3.10.8. The Planning Obligations SPD[61] sets out the provision unit rate for open space (£231,224 per 1.63 ha per 1,000 population). This implies that meeting the open space requirements of the additional population associated with the potential emerging allocations to 2041 (136.60 ha) would generate a cost of £19,377,242million. It should be noted that this excludes the playspace element (0.85 ha) which is covered within the playspace chapter.

3.10.9. The Project Schedule assumes that this infrastructure is unfunded. Developers will be expected to provide open space on-site and / or contribute to off-site provision to cater for demand arising from new development. Funding may also come forward from public sector and third sector sources.

3.10.10. The TCBGC network of green spaces and corridors, including the Salary Brook Country Park, is also included in the Project Schedule and assumed to be unfunded.

Summary

3.10.11. There are 440 open spaces in Colchester comprising 954 hectares of land use coverage.

3.10.12. There is a good provision of open space in Colchester, particularly in the urban area of Colchester. There is a current deficit of provision when accessibility catchment areas and

[60] This additional population is estimated by multiplying the number of homes associated with potential emerging allocations (11,936) by the average household size in Colchester as per the Census 2021 (2.35 people per household).
[61] Colchester Borough Council, (2019); Planning Obligations Provision of Open Space, Sport and Recreational Facilities Supplementary Planning Document.

benchmark space standards are taken into account in the South and West of the local authority area.

3.10.13. In total, 19 allocated sites within the existing Local Plan make provision for open spaces of varying scales. Also, the PPOSS has identified 23 additional open sites serving catchment gaps that would benefit from enhancements. Costs and funding status for these projects is unknown, though it is likely that funding and delivery would be via the developer.

3.10.14. The TCBGC will create a multi-functional network of primary green spaces and corridors, including creation of the Salary Brook Country Park as part of Phase 1, green corridors to distinguish between the three neighbourhoods, and the provision of sports and leisure facilities.

Applying quantitative standards for provision of different types of open space to projected population increase associated with the potential emerging allocations (28,399 residents), and a benchmark cost, indicates an estimated cost of £19.3 million for open space over the Local Plan period to 2041. This has been recorded in the Project Schedule as a funding gap. However, planning policy requires either on-site provision or financial contribution towards open spaces in order to meet the demands of new residents.

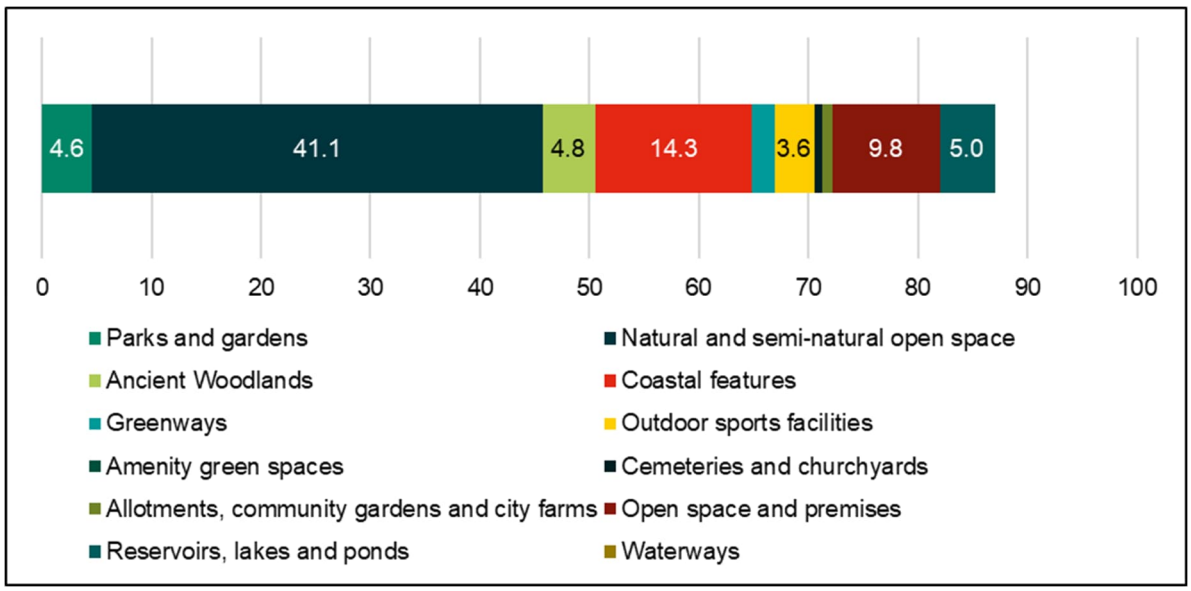
3.11. Green infrastructure

Baseline

Current provision

3.11.1. As assessed in 2020, around 26.1% of the local authority land area of Colchester would be considered to be green infrastructure[62]. This represents around 87.0km^2 of 333.0km^2. A breakdown of the land area by green infrastructure type is shown in Figure 3-7.

Figure 3-7 Green infrastructure land use in Colchester by infrastructure type (km^2)



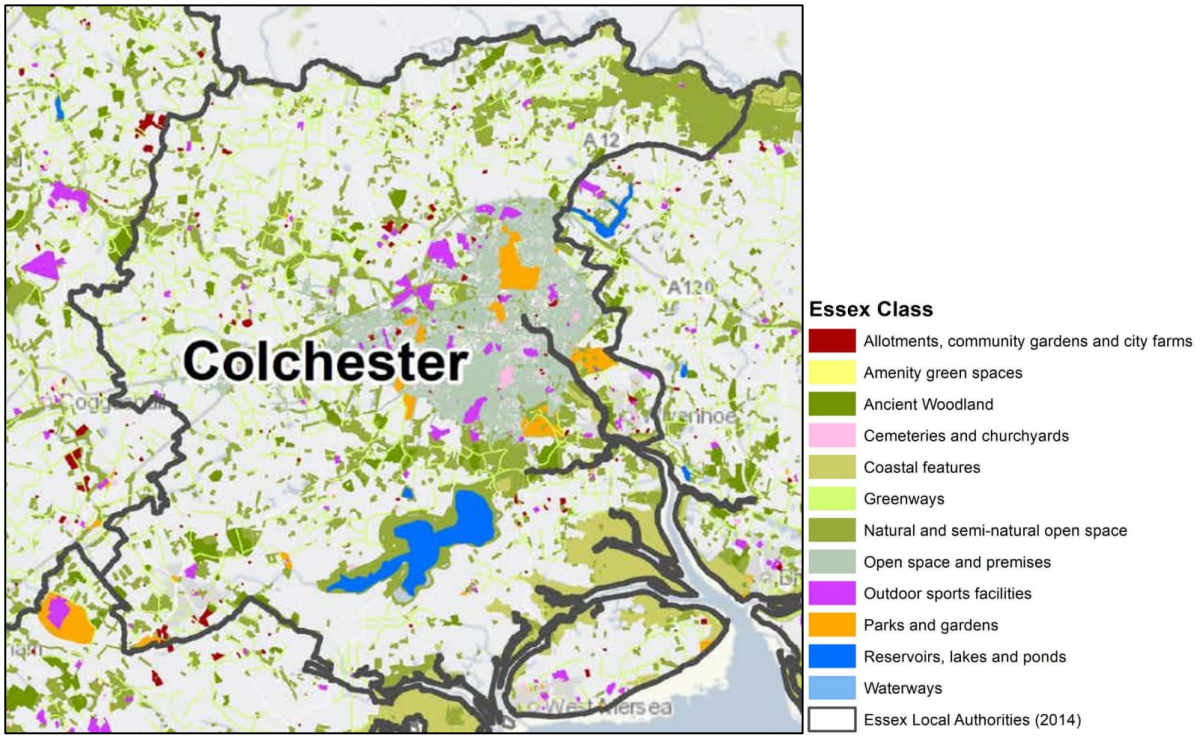
Source: Essex County Council, (2020); Essex Green Infrastructure Strategy. Appendix B4 – Green Infrastructure Asset Data.

3.11.1. The spatial distribution[63] of green infrastructure types across Colchester is shown in Figure 3-8. A large proportion of green infrastructure in terms of land use coverage is natural and semi-natural open space, of which the largest contiguous area is Dedham Vale. A significant portion of the green infrastructure is also coastal features, particularly at Fingringhoe Wick and Mersea Island. Examples of green infrastructures located in proximity to population centres and providing multiple functions to communities include High Woods Country Park,

[62] Essex County Council, (2020); Essex Green Infrastructure Strategy.
[63] The mapping of green infrastructure derives from Essex County Council analysis, however CCC have also produced interactive mapping of green networks and waterways, which is available online: https://colchester.oc2.uk/document/48

Abberton Reservoir and surrounds, as well as contiguous green infrastructure between Colchester and Halstead (Braintree).

Figure 3-8 Green infrastructure in Colchester



Source: Essex County Council, (2020); Essex Green Infrastructure Strategy.

Infrastructure requirements to 2041

3.11.2. The provision and enhancement of green infrastructure is promoted by planning policy, guidance and proposals within the Essex Green Infrastructure Strategy[64] and CCC's Green Network and Waterways Guiding Principles[65].

3.11.3. The current Local Plan sets out an aspiration to complete the Colchester Orbital Route. Going forward, there are aspirations to further enhance access and connectivity to the Orbital, and development proposals in relevant locations should contribute to this[66]. The Orbital route is included within the Project Schedule.

3.11.4. Many of the allocated sites within the existing Local Plan make provision for contributions of new or enhanced green infrastructure elements, including those below (noting that some of these may have been implemented already):

- North Colchester and Severalls Strategic Economic Area ;
- North Station Special Policy Area;
- Knowledge Gateway and University of Essex Strategic Economic Area;
- East Colchester / Hythe Special Policy Area;
- Stanway Residential Sites;
- Land at Chitts Hill; and
- Land at Irvine Road.

3.11.5. Demand for green infrastructure has not been modelled for this IADP given the overlap with the open space typologies covered within the previous chapter. However new development is at the forefront of delivering green infrastructure to Colchester. All development should integrate and/or improve green infrastructure given its ability to promote active and

[64] Essex County Council, (2020); Essex Green Infrastructure Strategy.
[65] Colchester City Council, (2024); Green Network and Waterways Guiding Principles.
[66] Colchester Borough Local Plan 2017 – 2033, Section 2.

sustainable transport. New development can allow for easier integration of green infrastructure principles and benchmark standards if incorporated at early stages of design. Development and expansion of existing communities should be cognisant of the opportunities to enhance existing green infrastructure or address deficits in provision or access.

3.11.6. Since April 2024 both minor and major development has been required by policy to delivery 10% Biodiversity Net Gain (BNG) such that natural environment is in a measurably better state following development. This policy will therefore apply to all scales of development regardless of spatial option pursued, however there may be opportunities to achieve higher BNG whereby habitat creation is in areas of strategic conservation importance throughout landscapes[67].

Costs, funding and delivery

3.11.7. Costs have not been modelled for green infrastructure given the overlap with the open space chapter.

3.11.8. As noted above, the Colchester Orbital Route is included in the Project Schedule but costs and funding status are currently unknown. Also, there are eight allocated sites which the Local Plan identifies as making for provision for contributions of new or enhanced green infrastructure elements; these sites have been included in the Project Schedule within a single entry. Costs for these projects are unknown and it is that they are currently unfunded, though it is likely that developers play a role in their delivery.

3.11.9. The Essex Green Infrastructure Strategy[68] identifies proposals under the following themes, and considers how each might be delivered:

- Marketing, branding and promotion;
- Re-designation of green infrastructure;
- Environment net gain and offsetting;
- Improve, repurpose and create new multi-functional green infrastructure;
- Natural flood management techniques;
- Connect people to green infrastructure through active travel; and
- Delivering environmental therapies and activities.

3.11.10. The planning and delivery of these priorities can be promoted through new developments and integrated with infrastructure development.

3.11.11. The multi-functionality of green infrastructure is important from a cost perspective, given the ability of green infrastructure to provide a range of services, meaning services such as drainage, recreation, biodiversity, and connectivity can be achieved through the same interventions without incurring ‘doubling’ of costs.

3.11.12. Green infrastructure provision can be funded through developer contributions as well as a range of other funding sources, as shown in Table 3-18. Further detail on how these are accessed and which types of infrastructure these might be applicable to are provided by the Essex Green Infrastructure Strategy Appendices[135]:

Table 3-18 Potential funding sources for green infrastructure

Potential funding sources		
The National Lottery	EU funds	Natural England
Landfill Tax	Landfill restoration programmes	S106
S106 / CIL	Countryside Stewardship	Capital Programme
Capital Programme	Private Sponsorship	Charitable Trust

[67] UK Parliament, (2024); Biodiversity net gain. Available at: https://researchbriefings.files.parliament.uk/documents/POST-PN-0728/POST-PN-0728.pdf
[68] Essex County Council, (2020); Essex Green Infrastructure Strategy.

Flood defence funding	Natural Flood Management Fund	Love Every Drop / Make Rain Happy
Future High Street Fund	Partnership between councils	Community partnerships, such as “friends of“ groups
Social Prescribing	Out Source	RAMS – Recreational disturbance Avoidance and Mitigation Strategy

Source: Essex County Council, (2020); Essex Green Infrastructure Strategy: Appendix Part B - Appendix B13.

Summary

3.11.13. Around 26.1% of the Colchester local authority area is considered green infrastructure. A large proportion of this is natural and semi-natural open space (of which the largest contiguous area is Dedham Vale) and also coastal features (particularly at Fingringhoe Wick and Mersea Island). Examples of green infrastructures located in proximity to population centres and providing multiple functions to communities include High Woods Country Park, Abberton Reservoir and surrounds, as well as contiguous green infrastructure between Colchester and Halstead (Braintree).

3.11.14. The provision and enhancement of green infrastructure is promoted by planning policy, guidance and proposals within the Essex Green Infrastructure Strategy[69] and CCC’s Green Network and Waterways Guiding Principles[70].

3.11.15. The current Local Plan sets out an aspiration to complete the Colchester Orbital Route; improvements to access and connectivity to this route is included within the Project Schedule. Also, many of the allocated sites within the existing Local Plan make provision for contributions of new or enhanced green infrastructure elements; these projects are recorded in the Project Schedule as a single line entry. Costs and funding status are currently unknown.

3.11.16. Demand and costs for green infrastructure associated with potential emerging allocations to 2041 has not been quantified given the overlap with the open space typologies covered within the previous chapter. However, new development is at the forefront of delivering green infrastructure to Colchester. All development should integrate and/or improve green infrastructure given its ability to promote active and sustainable transport, and to integrate green infrastructure principles at early stages of design.

3.11.17. A range of potential funding sources and delivery arrangements exist for green infrastructure including developer contributions, public sector and third sector sources.

3.12. Playspace

Baseline

Current provision

3.12.1. The latest data identified a total of 118 sites providing playspace in Colchester, including 11 Local Area for Play (LAPs), 54 Local Equipped Area for Play (LEAPs), 15 Neighbourhood Equipped Area for Play (NEAPs), and 38 casual sites[71]. CCC’s website states the Council manages 81 playgrounds, with additional playgrounds provided by Parish and Town Councils and the Ministry of Defence.

3.12.2. No shortfalls in quantity have been identified with current playspace provision in Colchester. The total area of land occupied by playspaces in Colchester is 6.21 ha, which works out to 0.03 ha per 1,000 population. The Open Space Report used the current provision levels to identify potential shortfalls in existing provision; a sub-area analysis is shown in Table 3-19. Overall, all the sub-areas in Colchester are shown as having a sufficiency or being level (i.e. provision balanced with need).

[69] Essex County Council, (2020); Essex Green Infrastructure Strategy.
[70] Colchester City Council, (2024); Green Network and Waterways Guiding Principles.
[71] Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.

Table 3-19 Playspace provision against standards

		Play provision	
Analysis area	**Number**	**ha**	**+ / -**
Central/East	73	0.03	Level
North	16	0.06	+0.03
South	13	0.03	Level
West	16	0.04	+0.01
Colchester	**118**	**0.03**	**-**

Source: Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.

3.12.3. Just over half the playspace sites identified in the Open Space Report have been rated above the quality threshold. It was identified that CCC should consider delivering improvements to playspace provision in regard to the maintenance/appearance and/or the quality of equipment on sites. Small LAPs can often be left in poor condition, highlighting the challenge of maintaining multiple sites across Colchester.

3.12.4. In terms of accessibility, no significant catchment gap was identified for playspace. Areas with greater population density were identified to generally be within walking distance from play provision.

Infrastructure requirements to 2041

3.12.5. The current Local Plan[72] identifies provision for some allocated sites such as Layer de la Haye (Policy SS10) and West Mersea Dawes Lane (Policy SS12a). Some of these sites may have already been delivered. The Colchester and Tendring Open Space Strategy[73] also set outs playspace requirements for the TCBGC.

3.12.6. As outlined in Table 3-20, it is estimated that a population increase of 28,399 persons in Colchester by 2041[74] would generate a demand for an additional 0.85ha of children's playspace. This is based on the demand benchmarks set out in the Open Space Report[75].

Table 3-20 Open space requirements

Open space typology	Open Space report standards (ha per 1,000 population)	Demand area (ha) to 2041
Playspace	0.03	**0.85**

Costs, funding and delivery

3.12.7. The above-mentioned projects identified within the existing Local Plan (some of which may already have been delivered) are included within the Project Schedule as a single entry; costs and funding status are currently unknown, but it is likely that the developer would be responsible for funding and delivery.

3.12.8. The most recent planning policy relating to the costs, funding, and delivery of playspaces is the Provision of Open Space, Sport and Recreational Facilities Supplementary Planning Document (SPD)[76] (2006). However, a supplementary planning guidance document setting out the updated costs for open space, playspace, and sports facilities was published in April 2019[77]. This indicates that a NEAP costs £167,647.

[72] Colchester City Council, (2017); Colchester Borough Local Plan 2017-2033 Section 2.
[73] Knight, Kavanagh, and Page, 2023; 'Colchester and Tendering Open Space, Playing Pitch, Outdoor Sports and Built Facility – Overarching Strategy Feb 2023'.
[74] This additional population is estimated by multiplying the number of homes associated with potential emerging allocations (11,936) by the average household size in Colchester as per the Census 2021 (2.35 people per household).
[75] Colchester Borough Council/Knight Kavanagh and Page, (2023); Open Space Report.
[76] Colchester Borough Council, (2006); Provision of Open Space, Sport and Recreational Facilities Supplementary Planning Document.
[77] Colchester Borough Council, (2019); Supplementary Planning Document – Charges Effective from 1 April 2019.

3.12.9. Fields in Trust guidance indicates that a NEAP is typically 1,000 sqm in size. A cost of £168 per sqm is therefore applied to the demand estimate of 0.85 ha set out above. This indicates a cost of £1,428,297 for playspace, which has been included within the Project Schedule.

3.12.10. In most instances it will be the developer that delivers play space facilities. Provision of facilities in other locations could be the responsibility of either CCC or the parish/town council in question[78]. For the purposes of the Project Schedule, it is assumed that this investment in playspace is currently unfunded.

Summary

3.12.11. No shortfalls in quantity have been identified with current playspace provision in Colchester. There are 118 sites totalling 6.21 ha of land; including 11 LAPs, 54 LEAPs, 15 NEAPs, and 38 casual sites.

3.12.12. Just over half the playspace sites identified in the Open Space Report have been rated above the quality threshold. It was identified that CCC should consider delivering improvements to playspace provision in regard to the maintenance/appearance and/or the quality of equipment on sites.

3.12.13. In terms of accessibility, no significant catchment gap was identified for playspace. Areas with greater population density were identified to generally be within walking distance from play provision.

3.12.14. The existing Local Plan identifies open space requirements on some allocated sites; costs and funding status are currently unknown, but it is likely that the developer would be responsible for funding and delivery.

3.12.15. It is estimated that the additional population associated with the potential emerging allocations will generate demand for 0.85 ha playspace to 2041, with an associated cost of £1.43 million. For the purposes of the Project Schedule, it is assumed that this investment in playspace is currently unfunded.

3.13. Youth facilities

Baseline

Current provision

3.13.1. Essex Youth Services and CCC provide youth services in Colchester. There are three youth centres in Colchester, as shown in Table 3-21, including Colchester Townhouse, Highwoods Youth Centre and Stanway Youth Centre. Highwoods Youth Centre was recently renovated using funding from the Town Deal programme. Upgrades included a new entrance, modernised kitchen, upgraded restrooms, and improved accessibility features.

3.13.2. Additionally, youth activities and clubs are hosted in facilities such as village halls and other venues across Colchester. The Scout Association runs a range of active groups which provide skills and activities for young people across the local authority area from dedicated scout huts and rented venues. Non-dedicated facilities such as these will be considered a part of the specific community facilities chapter (Section 3.14).

Table 3-21 Youth facilities in Colchester

Youth facility	Activities and services
Colchester Townhouse	Police Cadets Duke of Edinburgh's Award Young Volunteers Leaving and After Care Team Kinetix Young Essex Assembly Home Ed Teen meet

[78] Colchester Borough Council/Navigus, 2017; Colchester Infrastructure Delivery Plan.

Youth facility	Activities and services
Highwoods Youth Centre	St Luke's Youth Club The Spot
Stanway Youth Centre	Stanway Community Youth Club Inclusive Club

Source: Essex Youth Services, (2024); Find a youth group. Available at: https://youth.essex.gov.uk/young-people/find-a-youth-group/

Infrastructure requirements to 2041

3.13.3. Including the completed works on Highwoods Youth Centre described above, £1.3 million of funding from the Town Deal programme will be used to upgrade the three youth centres in Colchester. This is included as a project within the Project Schedule.

3.13.4. Beyond this, demand for youth facilities will increase to 2041 due to planned development. Department for Culture, Media and Sport (DCMS) guidance suggests that facilities used for youth services could be accommodated within in youth centres, community halls or schools as well as other fit-for-purpose and appealing settings. This may be within local authority owned buildings and other locations. Therefore while demand for youth facilities specifically to 2041 has not been modelled, it is assumed that at least some of this demand could be accommodated by community centres, demand for which is covered within the next chapter.

Costs, funding and delivery

3.13.5. The upgrades to Colchester's three youth centres described above, costing £1.3 million, are assumed to be funded by the Town Deal programme. Beyond this, costs of meeting demand to 2041 have not been quantified, though it can be assumed that at least some proportion are covered within the community centre costs identified within the next chapter.

3.13.6. The local authority has a statutory obligation to provide, where practicable, a sufficient quantity of youth services. Local authorities may work with a variety of delivery partners, as set out in Table 3-22.

Table 3-22 Potential delivery partners for youth services

Potential delivery partners		
Young people	Central government	District and parish councils
Youth workers	Schools, colleges and other educational settings	Voluntary, community and social enterprise sector
Businesses and employers	Health, care and well-being workers and bodies	Family support services
Agencies including health and police	Other organisations offering activities for young people	

Source: Department of Culture, Media and Sport, (2023); Statutory Guidance for Local Authorities on Services and Activities to Improve Young People's Well-being.

3.13.7. In the context of constrained budgets, it is for the local authority to decide how limited funds can have the greatest impact and in doing so address barriers to participation and gaps in provision. Provision of services may be funded in part through service charges to users.

3.13.8. The Local Government Association[79] highlights a range of programmes and funding opportunities for youth services, underpinned by the 2022 Government pledge[80] as part of the National Youth Guarantee to ensure access for every young person to regular youth services. These include, but are not limited to, those opportunities shown in Table 3-23.

[79] Local Government Association, (2024); Must know for youth services. Available at: https://www.local.gov.uk/publications/must-know-youth-services
[80] Department for Digital, Culture, Media and Sport, (2022); Youth Review: Summary findings and government response.

Table 3-23 Youth services funding opportunities and programmes

Funding opportunity or programme	Description
#iwill fund	Organisation providing social action opportunities for young people
Building Futures Programme	£15 million programme aimed at supporting young people at risk from becoming not in employment, education and training (NEET)
Youth Endowment Fund	Fund aimed at the prevention of youth participation in violence
National Citizen Service	Provider of residential and community experiences

Source: Local Government Association, (2024); Must know for youth services. Available at: https://www.local.gov.uk/publications/must-know-youth-services

Summary

3.13.9. Essex Youth Services and CCC provide youth services in Colchester, including at three dedicated youth facilities, as well as across other non-dedicated venues.

3.13.10. £1.3 million has been secured from the Town Deal programme to upgrade the three youth centres in Colchester. Beyond this, demand for youth facilities will increase to 2041; this has not been modelled as part of this report but it is assumed that at least some of this demand could be accommodated by community centres which are covered within the next chapter.

3.13.11. The local authority may work with a variety of delivery partners to provide youth services.

3.13.12. Local authorities may charge service users, although funding where available should be directed where needs are identified such that barriers to access are overcome, particularly in communities where specific gaps are identified. National funds may represent additional funding sources available to youth organisations and other delivery partners.

3.14. Community facilities

Baseline

Current provision

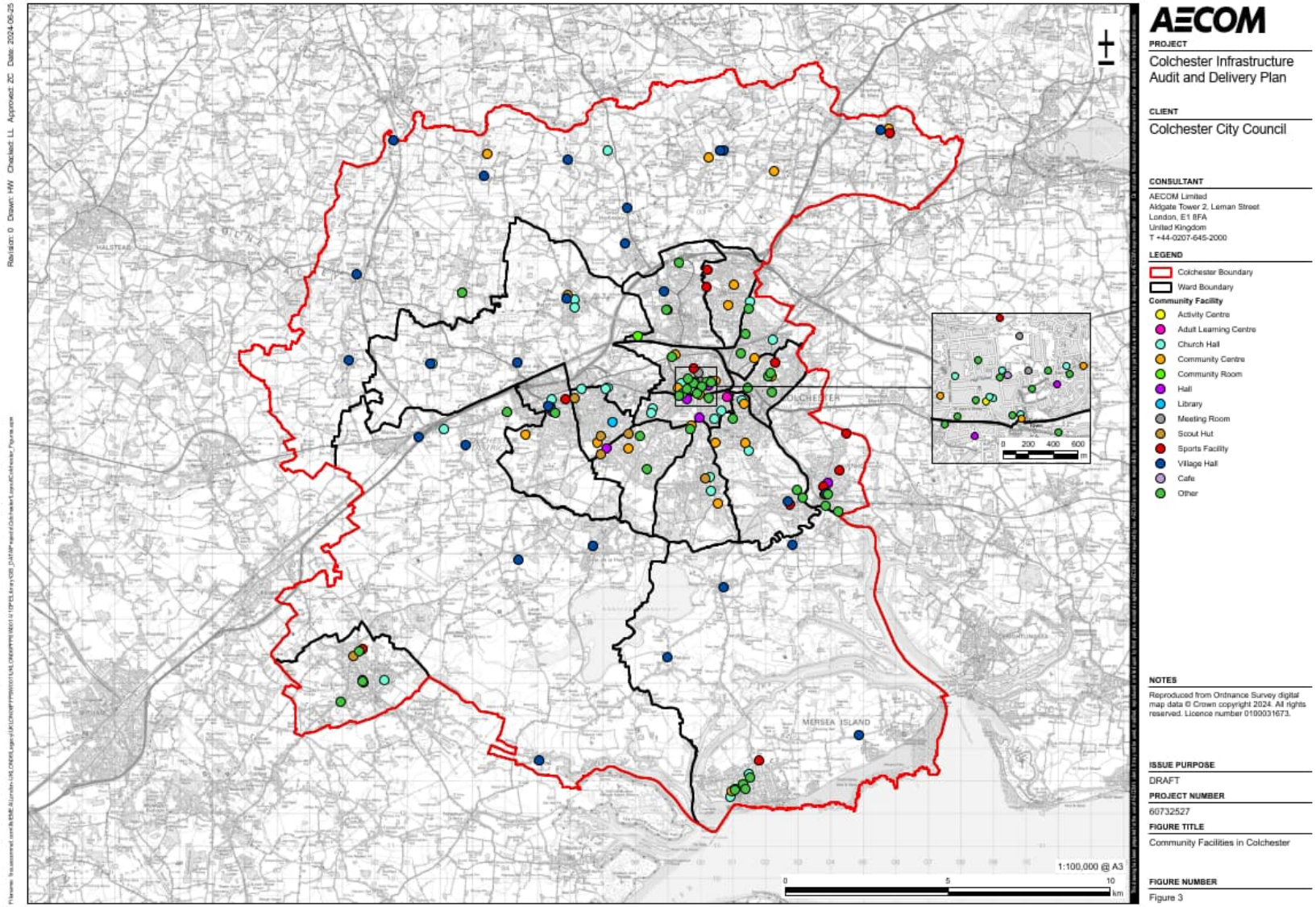
3.14.1. CCC keeps an up-to-date audit of community facilities. The audit records 135 community facilities, comprising 33 church halls, 23 community centres, eight scout huts, 31 village halls, 34 other/miscellaneous facilities, and six libraries. These are shown in Table 3-24 and Figure 3-9.

Table 3-24 Community facilities in Colchester

Facility type	Count
Church hall	33
Community centre	23
Scout huts	8
Village hall	31
Other	34
Library	6
Total	**135**

Source: Colchester City Council/AECOM analysis. Essex Library Service, (2024); Our library locations and opening times.

Figure 3-9 Community facilities in Colchester



Future Baseline including planned schemes

3.14.2. The Local Plan Section 2[81] comments on the availability of community services in different locations across Colchester as well as policy aspirations for the future delivery of community facilities necessary to support growth, where applicable. These are summarised in Table 3-25. While some locations have a wide range of facilities and appear to be well-served, many would benefit from new or enhanced facilities. These include Greenstead in the urban area which could benefit from upgrades. For a number of district centres (Tollgate, Turner Rise and Peartree Road), their role and function could be enhanced by new facilities. A lack or limited range of facilities is highlighted for Wivenhoe, Dedham, and Boxted. Interdependency on shared facilities is identified in Chappel and Wakes Colne.

Table 3-25 Local Plan commentary on community facilities

Location	Availability and future aspirations
Urban Area of Colchester	Greenstead could benefit from comprehensive upgrading of community facilities
Tollgate	Role and function as district centre would be enhanced through introduction of new…community facilities. Policy WC1 promotes introduction of new facilities.
Turner Rise	Role and function as district centre would be enhanced through introduction of new…community facilities
Peartree Road	Role and function as district centre would be enhanced through introduction of new…community facilities
Tiptree	Wide range of community uses
West Mersea	Wide range of community uses. Brierley Paddocks site could deliver community facilities if need identified.
Wivenhoe	Limited range of community facilities
Dedham	Limited range of community facilities
Boxted (Workhouse Hill, Mill Road)	No community facilities
Boxted (Boxted Cross)	Few community facilities
Chappel and Wakes Colne	Interdependency in respect of shared facilities
Fordham	Well served by community facilities
Layer de la Haye	Well served by community facilities
West Bergholt	Range of community facilities

Source: Colchester Borough Council, (2022); Local Plan 2017 – 2033 Section 2.

3.14.3. The Everyone's Library Service 2022 – 2026[82] strategy covers the provision of library services across Essex and makes clear that ECC is committed to the continued operation of all libraries across the county. One of the county's four flagship libraries is located in Colchester.

Infrastructure requirements to 2041

3.14.4. The Heart of Greenstead scheme is part of Colchester's Town Deal Funding awarded in 2022. It will include an improved community centre, a library, a community cafe, and flexible community space. This project has been recorded in the Project Schedule (under the category of cultural facilities rather than community centres).

[81] Colchester Borough Council, (2022); Local Plan 2017 – 2033 Section 2.
[82] Essex County Council/Essex Library Services, (2024); Everyone's Library Service 2022 – 2026. Available at: https://libraries.essex.gov.uk/digital-content/our-strategies-policies-and-terms/everyones-library-service-20222026

3.14.5. With regard to additional requirements arising from growth to 2041, the Community Infrastructure SPD[83] sets out that need for community facilities will be identified using the existing evidence base, including by identifying where high levels of deprivation can be addressed with the delivery of specific services. The SPD states that the standard community floorspace to be provided by each new dwelling would be 0.75m^2, which is used to derive developer contributions. This benchmark indicates a high level estimate of needs associated with the potential emerging allocations and windfall sites identified within the development trajectory (12,070 homes) of 9,053 sqm of community space.

3.14.6. The Everyone's Library Service 2022 – 2026[84] strategy sets out the commitments with regard to the provision of library services across Essex. As part of the planned improvements to infrastructure, there will be a planned programme of building improvements as well as developing the mobile and outreach service. These commitments are included within the Project Schedule, noting that further detail including cost and funding status is currently lacking.

3.14.7. In Essex the requirement for a new standalone facility would be triggered when a discrete population of 7,000 or more is introduced in location that is not connected to existing services[85]. Likewise a new facility is required when a projected population more than doubles within an existing library catchment area. Contributions would typically be sought for the library most affected by the new development (likely a sub-regional library even if further away).

3.14.8. The Essex County Council Developers' Guide to Infrastructure Contributions indicates that there is typically a requirement of 30 sqm library space per 1,000 population. This implies that the population associated with the potential emerging allocations to 2041 would requirement 850 sqm additional library space to 2041.

3.14.9. TCBGC Infrastructure Delivery, Phasing and Funding Plan estimates demand of 540 sqm library space and 1,080 sqm community space will arise from the residents of the garden community, totalling 1,800 sqm flexible community space within neighbourhood hubs

Costs, funding and delivery

3.14.1. The Heart of Greenstead scheme is shown in the Project Schedule as funded, as it is a key part of the £18.2 million Town Deal Funding that Colchester was awarded in August 2022.

3.14.2. As set out within the Community Facilities SPD[86], CCC expects a financial contribution from developers from all residential development which creates new units of accommodation. Where the additional population as part of the proposed development is large enough a new community facility on-site may be warranted. The SPD indicates financial contribution of £1,086 per dwelling based on 2013 build costs of community centres; this is £1,548 per dwelling when updated to 2024 prices[87]. On this basis, an additional 12,070 homes implies total contributions of £18,684,360 million.

3.14.3. The Community Facilities SPD[88] also sets out how the contribution will be used, namely either:

- 'a capital contribution to invest in and develop existing facilities in the local area';
- 'a capital contribution towards developing a dedicated community space';
- 'the provision of a purpose built and equipped centre together with financial contribution towards the running and management costs for the first three years';

[83] Colchester Borough Council, (2013); Provision of Community Facilities Supplementary Planning Document.
[84] Essex County Council/Essex Library Services, (2024); Everyone's Library Service 2022 – 2026. Available at: https://libraries.essex.gov.uk/digital-content/our-strategies-policies-and-terms/everyones-library-service-20222026
[85] Essex County Council, (2025); The Essex County Council Developers' Guide to Infrastructure Contributions.
[86] Colchester Borough Council, (2013); Provision of Community Facilities Supplementary Planning Document.
[87] Build cost has been updated based on ONS Construction Output Price Indices (All new work index). Available at: https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/datasets/interimconstructionoutputpriceindices
[88] Colchester Borough Council, (2013); Provision of Community Facilities Supplementary Planning Document.

- ‘the provision of a plot of land of appropriate size and location to enable a centre to be built’; or
- ‘a financial contribution towards a borough wide facility’.

3.14.4. It is a statutory duty of ECC to provide a library service which is comprehensive and efficient for any resident or student wishing to use it[89]. ECC will seek developer contributions for libraries to support either a new library building, where the additional population exceeds 7,000, or a library extension or an upgrade of existing facilities which are most likely to be impacted by additional demand. The suggested costs associated with these interventions, as reported in 2024, are shown in Table 3-26.

Table 3-26 Developer contributions for library provision, calculation costs

Intervention	Cost	Notes
A new library building, fixtures and stock	Negotiated on site-by-site basis	Only likely sought on major new housing sites/allocations of 7,000+
A library extension	£2,020 per m^2 £144 per dwelling	30m^2 per 1,000 population Based on RICS East of England Library tender value 2013 Q1
+ fit out	£100 per dwelling	Furniture, decoration ,new flooring, reconfigure layout, refurbish toilets, improve access, external works such as parking and bike racks, and technology
= total	£244 per dwelling	-
Major capital project to existing library facility	£244 per dwelling	-
Provision of stock, IT equipment including computers, provision of learning equipment	£75 per dwelling	-

Source: Essex County Council, (2024); The Essex County Council Developers’ Guide to Infrastructure Contributions.

3.14.5. A required contribution of £244 per dwelling is assumed, which updated to 2024 prices is £348 per dwelling. This generates a high level estimate of £4,200,360 required to cater for demand arising from the potential emerging allocations to 2041.

3.14.6. As well as funding from developers and local authorities, there are various charitable funds and programmes available (at the time of writing) to communities in Colchester, as set out by CCC[90]. Table 3-27 summarises these funds which could be applicable to the delivery of community facilities and services.

Table 3-27 Community funding opportunities in Colchester

Charity/fund	Description
One Stop Community Partnership Programme	Supporting community groups focusing on food poverty, supporting the vulnerable, elderly and low-income families, local sports teams, improving the environment and reducing waste.
Persimmon Community Champions	Grant funding to registered charities, clubs, schools and other organisations which have already raised money for projects helping the local community.
National Lottery Awards for All England	Supporting communities with what matters most to them, including the cost of living crisis.
Screwfix Foundation	Supports projects that improve, fix and repair buildings, homes and facilities specifically used by people in need throughout the UK.
National Lottery Community Fund	Funding organisations that bring different communities together, especially projects that join people from different backgrounds together, connect online

[89] Essex County Council, (2020); The Essex County Council Developers’ Guide to Infrastructure Contributions.
[90] Colchester City Council, (2024); Funding opportunities – Community. Available at: https://www.colchester.gov.uk/community-funding-opportunites/funding-opportunities/?id=andpage=community

Charity/fund	Description
	and offline worlds and ensure everyone gets a say in the future of their community.
Tudwick Foundation	The foundation invites applications for community projects, mainly voluntary organisations and community groups that are addressing outstanding social needs, offering between £300 and £3,000.
Essex Community Foundation (ECF)	Funding for charity, voluntary and community organisations
Tesco Community Grants	Community groups across the UK are being asked to apply for funding for local projects (up to £1,500) that matter to them. Eligible projects include breakfast or holiday lunch clubs, food banks, youth clubs or schools.
Community Enterprise Fund	Supports community organisations making an impact. The fund offers packages of blended loan and grant fund of up to £50k.
BandQ Foundation	An independent charity set up in 2020 to build on BandQ's commitment to make a positive difference in communities.
Biffa Award	Gives grants to community projects near landfill sites.
Trusthouse Charitable Foundation	Provide grants to small and medium local organisations in the UK who have successfully addressed local issues in communities with extreme urban deprivation and deprived rural districts.
Thrive Together Fund	A £6 million fund providing a package of loan (75%) and grant (25%) to eligible voluntary, community and social enterprise organisations, who focus on delivering social impact in England.
Warburtons Community Grants	Offers small grants up to £400 to support charities that are improving improve health, place or skills for families in their community.
The Wakeham Trust	Provides grants to help people rebuild their communities. They are particularly interested in neighbourhood projects, community arts projects, projects involving community service by young people, or projects set up by those who are socially excluded.

Source: Colchester City Council, (2024); Funding opportunities – Community. Available at: https://www.colchester.gov.uk/community-funding-opportunites/funding-opportunities/?id=andpage=community

Summary

3.14.7. CCC maintains an audit of community facilities which identifies 33 church halls, 23 community centres, eight scout huts, 31 village huts, six libraries and 34 other facilities in Colchester. The current Local Plan identifies that while some locations in Colchester have a wide range of community facilities and appear to be well-served, many would benefit from new or enhanced facilities, including Greenstead in the urban area, a number of district centres and some villages.

3.14.8. The Heart of Greenstead scheme is part of Colchester's Town Deal Funding awarded in 2022. It will provide a multi-use community campus including a library and community space.

3.14.9. Developer contributions may be sought to provide additional community space where large new populations are planned, or may be pooled to provide upgrades to existing facilities where smaller population increases are anticipated. Based on benchmarks within CCC's SPD on Provision of Community Facilities, estimated costs associated with meeting new demand arising from the potential emerging allocations to 2041 are £18.7 million.

3.14.10. ECC/Essex Library Services would only typically seek to build new library facilities where a new population in excess of 7,000 people is expected, and developer contributions would be sought to support this. Contributions towards the expansion of existing facilities or mobile services might otherwise be sought. Based on benchmarks within the ECC Developers' Guide to Infrastructure Contributions, estimated costs associated with meeting new demand arising from the potential emerging allocations to 2041 are £4.2 million.

3.14.11. It is estimated that new flexible community space totalling 1,800 sqm, to be provided within neighbourhood hubs, will be required as part of the TCBGC.

3.14.12. As well as developer and local authority funding, there are a number of charitable funds/grants which are be available to support grassroots projects including Colchester's community facilities.

3.15. Cultural and civic facilities

Baseline

Current provision

3.15.1. The category of cultural facilities is wide-ranging and includes art galleries, museums, heritage and public realm assets. This chapter also covers civic facilities covering courts and burial grounds / crematoria.

3.15.2. Colchester hosts a range of cultural facilities. A selection of the key facilities and venues are set out in Table 3-28.

Table 3-28 Cultural facilities and venues in Colchester

Type of asset	Asset
Creative education	University of Essex Department of Literature, Film and Theatre Studies
	Colchester School of Art (Colchester Institute)
Heritage sites	Colchester Castle
	Roman Circus
	Layer Marney Tower
	Chappel Viaduct
	Holy Trinity Church
	St Botolph's Priory
	Jumbo water tower
	Gosbecks Archaeological Park
Museums and art galleries	Firstsite
	Natural History Museum
	Munnings Art Museum
	Colchester Castle Museum
	Hollytrees Museum
	East Anglian Railway Museum
	We Are The Minories
	Art Exchange (University of Essex)
Live music	Colchester Arts Centre
	Charter Hall
	Castle Park
	St Botolph's Church
	Colchester Community Stadium
	The Town Hall
Theatre	Mercury Theatre

Type of asset	Asset
	Headgate Theatre
	Lakeside Theatre
	Colchester Arts Centre
Environment and nature	Beaches of Mersea
	Castle Park
	Highwoods
	Dedham Vale National Landscape (formerly AONB)
	Fingringhoe Wick
	Abberton Reservoir Nature Discovery Parks
Signals Essex Media Centre	
Major visitor attractions	Colchester Zoo
	Colchester Castle

Source: Colchester Borough Council, (2022); Colchester Cultural Strategy.

3.15.3. His Majesty's Courts and Tribunals Service (HMCTS), which is the executive agency of the Ministry of Justice for England and Wales, is responsible for the criminal, civil and family courts and tribunals in Colchester.

3.15.4. The structure of the courts and tribunals system requires that different types of case are attributed to specific types of court (e.g. Magistrates Court, Crown Court, County Court or High Court) as they arise[91]. There is one court in Colchester: Colchester Magistrates' Court and Family Court. The nearest Crown Courts are in Ipswich, Chelmsford and Southend.

3.15.5. Burial grounds in Colchester are usually overseen by associated religious institutions and managed locally, including determining whether there is space for new burials and/or if new burials are being accepted. Burial grounds are usually located adjacent to places of worship. As set out in the Stage 1 and 2 IADP Report, there are 24 burial grounds within the city and many of the surrounding villages have one or more burial grounds.

3.15.6. Nationally, a large proportion (around 79%) of the population who die are cremated[92] and the absolute number of cremations per year is rising. Colchester Cemetery and Crematorium provides cremation services in Colchester, and is operated and maintained in association with CCC. This crematorium has a theoretical capacity of 3,120 cremations per annum[93]. In Colchester, there were 1,831 cremations in 2022 and 1,491 cremations in 2023.

Infrastructure Requirements to 2041

3.15.7. Colchester was awarded £18.2 million from the Government's Town Deal fund in 2022 which will be invested in projects including cultural facilities. The Town Deal provided funding for a range of cultural initiatives, including:

- Transformed youth facilities;
- Digital connectivity;
- Public realm developments (Mercury Theatre and St Nicholas Square);
- New gateway locations in Vineyard Street;
- Heart of Greenstead; and

[91] Courts and Tribunals Judiciary, (2024); Structure of the Courts and Tribunal system. Available at: https://www.judiciary.uk/about-the-judiciary/our-justice-system/court-structure/
[92] The Cremation Society of Great Britain, (unknown); The Siting and Planning of Crematoria.
[93] Information provided by Colchester City Council.

- Preserving and improving key historic buildings ('Jumbo' water tower and Trinity Church).

3.15.8. In addition to the Town Deal funded projects mentioned above, the Cultural Strategy sets out an action plan for delivering and supporting cultural activities and assets across Colchester up to 2030. Those action plan items relating to cultural infrastructure/facilities and their timescales for delivery, resource requirements and delivery responsibilities are set out in Table 3-29. The non-Towns Fund projects are included within the Project Schedule within a single entry, as detailed information on these action plan items (including their funding status) is limited.

Table 3-29 Cultural Strategy action plan items relating to cultural facilities

Action	Timescale	Resources	Owner
Develop a programme of collaborative site specific events including multiple partners	Medium-term	Potential for ACE and other project grant funding	Creative Colchester, BID, Colchester Events (CCC), commercial sector, NPOs
Make the most of the public realm and create opportunity for art and heritage outside of cultural venues and museums	Medium-term	TBD	Creative Colchester, BID, NPOs, CCC, commercial sector
Develop a Parks and Open Space Strategy maximising the opportunities for creative and cultural activities in these important spaces	Medium-term	Existing resources	CCC
Increase the focus on Colchester's military heritage within existing museums and cultural venues	Medium-term	NLHF and/or other project grants, existing exhibition budgets	Colchester and Ipswich Museums (CCC), Garrison
Explore the potential for additional heritage 'interventions' outside of museums, such as the placement of a Roman mosaic under Lion Walk's pavement; finding more ways to work with developers and planning to bring important historical finds to life and interpret them, such as heritage related features in the built environment	Medium-term	Grant funding; fundraising and sponsorship, existing resources	CCC, landowners, heritage organisations, funding partners, developers
Continue the programme to enhance the interpretation of historic sites across the Borough working with and responding to communities and heritage groups	Ongoing	Heritage Grant funding, Section 106	CCC, landowners, heritage organisation, funding partners
Seek to improve the availability and accessibility of ancillary music industry infrastructure (e.g., record and equipment stores), studios (rehearsal, recording) and venues	Long-term	Consider rent incentives	Creative Colchester, commercial landlords, CCC
Walking and cycling corridor	Medium-term	TBD	TBD
Deliver 5G provision	Medium-term	Town Deal funding	We Are Colchester / CCC
Kerbless streets	Medium-term	Town Deal funding	We Are Colchester / CCC
Replace town centre pedestrian signage	Short-term	Existing funding	BID
Transformed Youth Facilities Building on existing youth provision, with a significant investment in facilities for young people	Medium-term	Town Deal funding	We Are Colchester / CCC
Deliver Queen Street Digital Working hub capital project	Medium-term	SELEP funding	We Are Colchester / CCC
Deliver Wilson Marriage Centre (Refurbishment and digital learning)	Medium-term	Town Deal funding	We Are Colchester / CCC

Action	Timescale	Resources	Owner
Redevelop Colchester Natural History Museum	Medium-term	NLHF funding and trusts and foundations	Colchester and Ipswich Museums (CCC)
Deliver Heart of Greenstead capital project	Medium-term	Town Deal funding	We Are Colchester / CCC
Deliver St Nicholas Square capital project	Medium-term	Town Deal funding	We Are Colchester / CCC
Deliver Jumbo capital project and develop feasibility study for future development	Short-term	Town Deal funding and NLHF	We Are Colchester / CCC
Deliver Balkerne Gate capital project	Short to medium-term	Town Deal funding	We Are Colchester / CCC
Deliver Holy Trinity and Trinity Square capital project	Medium-term	Town Deal funding	We Are Colchester / CCC
Deliver Vineyard Cultural Gateway and Essex County Hospital capital project	Medium-term	Town Deal funding	We Are Colchester / CCC

Source: Colchester Borough Council, (2022); Colchester Cultural Strategy.

3.15.9. New and expanded cultural infrastructure above those projects and aspirations described above may be required to 2041. A range of quantitative benchmarks published by national organisations have been applied to the population associated with the emerging potential allocations to 2041, though it is noted that such benchmarks do not reflect the quality and value of assets such as heritage assets. As shown in Table 3-30, the projected increase of 28,399[94] people in Colchester implies an estimated total requirement of 2,244 sqm cultural floorspace.

Table 3-30 Local benchmarks for provision of cultural facilities

Facility type	Source	Benchmark for provision	Demand (sqm) to 2041
Arts facilities	Arts Council England, and Museums, Libraries and Archives Council, 2009	45m^2 per 1,000 people	1,278
Archive facilities	Museums, Libraries and Archives Council, 2008	6m^2 per 1,000 people	170
Museums	Arts Council England, and Museums, Libraries and Archives Council, 2009	28m^2 per 1,000 people	795
			2,244

Source: Town and Country Planning Association, (2013); Improving Culture, Arts and Sporting Opportunities through Planning. A Good Practice Guide.

3.15.10. Ensuring there is appropriate capacity across the range of courts is the responsibility of the centralised HMCTS which operates at a larger geography than Colchester, and the catchment areas applicable to different courts varies. In terms of ensuring the appropriateness of the courts estate in the context of growing populations, HMCTS analyse:

- Whether areas without an existing court or tribunal presence should have one;
- The largest/smallest impact of a court or tribunal closure; and
- The optimum layout of court and tribunal buildings for a given sub-region, such as for multi-site reconfigurations (in the Spending Review 2025) [95].

3.15.11. It is reasonable to assume that population growth will lead to an increase in the demand for courts and tribunal infrastructure, though no planned projects have been identified and no demand quantification has been undertaken for this Stage 3 IADP Report.

[94] This additional population is estimated by multiplying the number of homes associated with potential emerging allocations (11,936) by the average household size in Colchester as per the Census 2021 (2.35 people per household).
[95] HM Courts and Tribunal Service, (2022); HMCTS Estates Strategy 2021 to 2031.

3.15.12. Estimates of future demand for cremation services at Colchester Cemetery and Crematorium are not available. However, given the absolute number of cremations per year is rising nationally it can be expected that expanded or new facilities will be required to support population growth to 2041.

3.15.13. During consultation, CCC Bereavement Services indicated that there will be no additional bereavement services demand specifically associated with the emerging development trajectory sites. However, a strategic review of Colchester Cemetery and Crematorium is being undertaken with a view to delivery of a new crematorium building or facility in 2027/28. A refit approach would be expected to cost £4.0 million whereas a new building would cost between £12.0 - £14.0 million. This project has not been entered into the Project Schedule as the requirement has not yet been confirmed by the strategic review.

3.15.14. If required, new crematoria in Colchester could be sited within the new Local Plan such that appropriate levels of expansion are considered alongside future proofing the proposed new facility for suitable expansion.

Costs, funding and delivery

3.15.15. The £18.2 million Towns Fund award, together with the £8.0 million National Lottery Heritage Fund (NLHF) recently awarded to the 'Jumbo Tower', is included in the Project Schedule as reflective of the cost and funding associated with the projects identified above. Beyond this, costs have not been identified for the delivery of cultural and civic facilities.

3.15.16. There are a number of funding sources available to support cultural facilities including:

- Organisations such as Arts Council England, Historic England, National Lottery Heritage Fund and other major cultural organisations[96];
- Developer contributions and planning obligations through S106 or CIL where related to a development proposal; and
- Smaller organisations offering grant funding such as The Headley Museums Archaeological Acquisition Fund; Benefact Trust, Essex Heritage Trust, and The Hervey Benham Charitable Trust[97].

3.15.17. The delivery of cultural infrastructure could be pursued/supported through the following mechanisms[98]:

- Use Classes Order and flexible use;
- Local Development Orders;
- Public-private partnerships;
- Social enterprises;
- Community asset transfer;
- Community Land Trusts;
- Development Trusts;
- Community development finance initiatives; and
- Local asset-backed vehicles.

3.15.18. It is not appropriate to report the funding sources, expenditures and delivery structure[99] of HMCTS here given the centralised organisation operates at a national scale and specific information related to Colchester is not publicly available.

[96] Town and Country Planning Association, (2024); Culture and Sport Planning Toolkit. Available at: https://cultureandsportplanningtoolkit.org.uk/
[97] Colchester City Council, (2024); Funding Opportunities – Arts and Heritage. Available at: https://www.colchester.gov.uk/community-funding-opportunites/funding-opportunities/?id=andpage=arts--and--heritage
[98] Town and Country Planning Association, (2013); Improving Culture, Arts and Sporting Opportunities through Planning. A Good Practice Guide.
[99] HM Courts and Tribunal Service, (2024); Annual Report and Accounts 2022-23.

3.15.19. The building costs for crematoria are variable. As noted above, CCC indicates that if a new crematorium building or facility is determined as required in Colchester, a refit approach would be expected to cost £4.0 million whereas a new building would cost between £12.0 - £14.0 million.

3.15.20. Crematoria derive income from fees; gross revenue from Colchester's existing facilities is estimated by CCC to be £1.6 million per annum. As well the local authority, other potential delivery options include Joint Crematorium Boards, Joint Crematorium Committee, private companies or joint ventures.

Summary

3.15.21. Key findings regarding the provision of cultural facilities in Colchester are:

- A wide range of cultural facilities are located in Colchester including heritage assets, art galleries and museums.
- £18.2 million was awarded to Colchester in 2022 from the Government's Town Deal of which a proportion will be dedicated to funding cultural projects; £8m has also recently been awarded to the 'Jumbo water tower' preservation project from NLHF.
- The Colchester Cultural Strategy sets out an action plan containing a number of other potential projects which will enhance Colchester's cultural assets to 2030, along with respective delivery responsibilities.
- CCC may wish to promote the enhancement of existing facilities, particularly where these heritage assets are in situ, or consider the development of new facilities at appropriate provision levels, to support future population growth. Charitable organisations and developer contributions (where related to the development) are potential funding sources to support this.
- Employing national benchmarks indicates that the population associated with the emerging potential allocations to 2041 would generate demand for 2,244 sqm floorspace to accommodate expanded arts galleries, archive facilities, and museums.

3.15.22. Key findings regarding the provision of civic facilities in Colchester are:

- HMCTS is responsible for the management of courts nationally, including Colchester Magistrates' Court and Family Court. Cases are dealt with at the appropriate court across local authority boundaries where necessary.
- HMCTS plans and manages demand including considering demographic trends and population growth over time to ensure the correct facilities are available in the correct locations. While it reasonable to expect demand for these facilities to increase with population growth, it is not possible to quantify this demand or estimate associated costs.
- There are a number of burial grounds in Colchester adjacent to places of worship. In addition, Colchester Cemetery and Crematorium provides cremations to support the needs of Colchester's population.
- Demand and costs arising from growth for bereavement services have not been quantified. However, CCC is undertaking a strategic review of the ways in which Colchester Cemetery and Crematorium could be expanded or supplemented with an additional facility.

3.16. Police

Baseline

Current provision

3.16.1. Essex Police were consulted during formulation of the Stage 3 IADP report and responded by providing an evidence base paper in December 2024, and an Addendum update in June 2025. This chapter is largely based on the information contained within those documents.

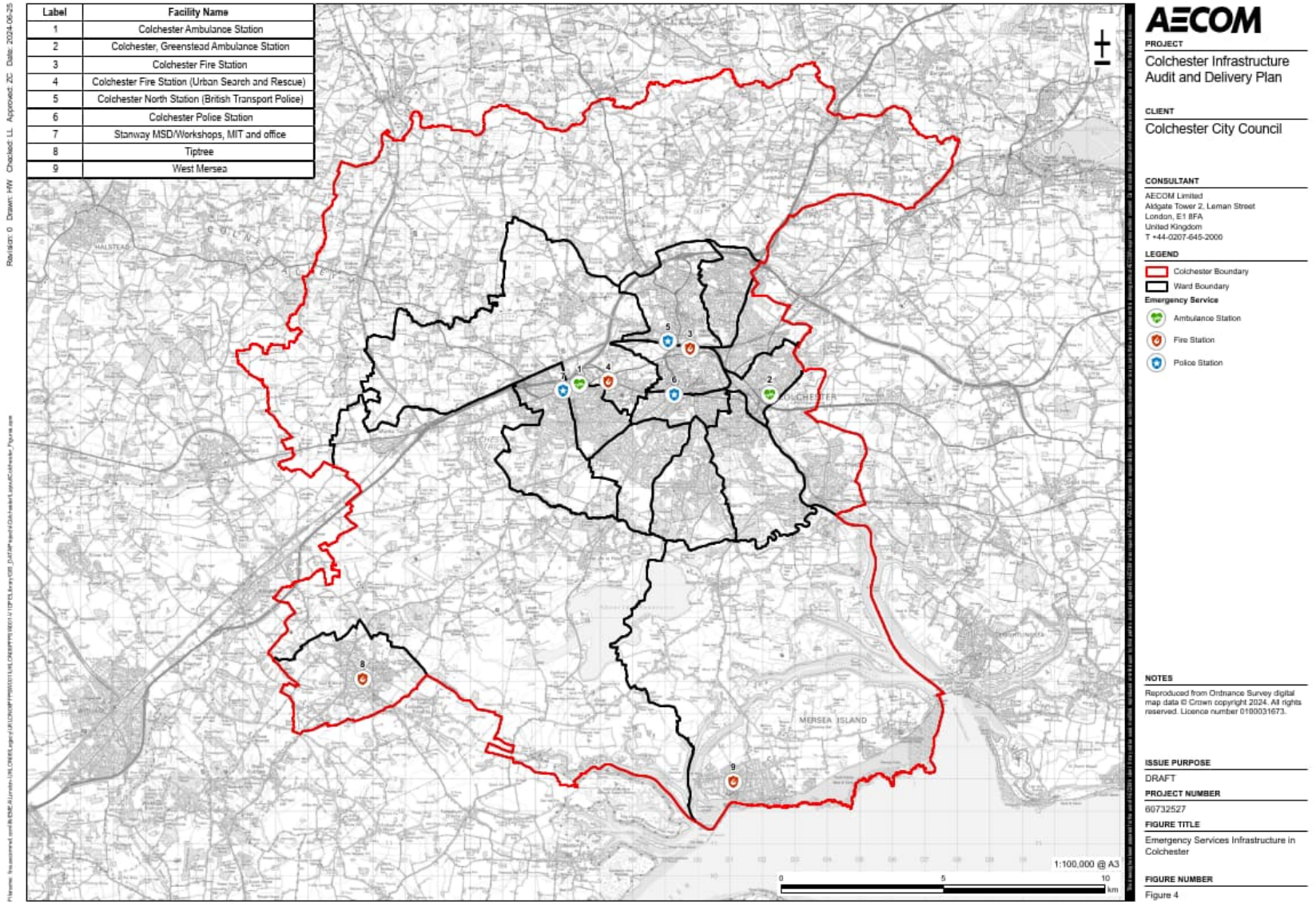
3.16.2. Essex Police operates a 'Local Policing Area' (LPA) policing model. Each LPA is resourced by a dedicated Neighbourhood Policing Team (NPT), consisting of Police Officers, Police Community Support Officers (PCSO's) Community Safety Engagement Officers, Children & Young Persons Officers, and support functions, including integrated local partners, and partnerships within co-located Community Safety Hubs. . The Colchester Local Plan Area is covered by the Colchester District Policing Area. The baseline police resources within the Local Policing Area are operating at capacity.

3.16.3. There is one police station in Colchester; this is shown in Figure 3-10. There is also a British Transport Police station. The Stanway site is no longer operational.

3.16.4. The NPPF advises that the purpose of the planning system is to contribute to the achievement of sustainable development, incorporating a social objective to support strong, vibrant, and healthy communities by fostering a well-designed and safe built environment. The NPPF requires planning policies and decisions to achieve healthy, inclusive safe places which are accessible, so that crime and disorder, and the fear of crime do not undermine the quality of life or community cohesion.

3.16.5. Planning policies should also promote public safety, including through the layout and design of developments. The Crime and Disorder Act 1998 (Section 17) places a duty on local authorities to reduce crime and disorder within the community.

Figure 3-10 Emergency services infrastructure in Colchester



Infrastructure requirements to 2041

3.16.6. Essex Police state that both the construction and occupation phases of residential development lead to an increase in the incidence of criminal activity. At the construction phase this includes property-based theft and vandalism, which leads to an increased impact on police facilities and a greater draw on Neighbourhood Policing Team (NPT) resources. At the occupation phase, increased populations give rise to an increase in crime and incidents against persons (e.g. violence, sexual, burglary, vehicle theft and criminal damage). New residents would be the victims of such crime, leading to an increased impact on police facilities and a greater draw on its NPT resources, including specialist unit support officers.

3.16.7. In addition, emerging new communities need to be integrated with existing communities, and an appropriate level and duration of community safety, cohesion, and policing would therefore need to be provided across the occupation phase of developments.

3.16.8. Overall, major new housing developments give rise to significant additional resource needs and implications for NPTs (including specialist officers supporting NPTs). Essex Police therefore requires additional police infrastructure/ facilities(police facilities) to be funded and/or provided by developers. Any requests for Section 106 or CIL funding would be supported by evidence to identify the need, which may be in the form of the following police facilities:

- Additional or enhanced police station floor space and facilities (including fit out and refurbishment);
- Custody facilities;
- Mobile police stations;
- Communications including ICT;
- Speed camera/Automatic number plate recognition technology;
- Police vehicles; and
- Funding for additional staff resources, incorporating the recruitment, training, equipping and tasking of Police Community Support Officers (PCSO's) during the construction phase of residential development, and recruitment, training and equipping of Neighbourhood Policing Team Officers (NPTO's) during the occupation phase of residential development.

3.16.9. Essex police have identified ten ‘Growth Areas’ (totalling 8,375 dwellings), where developer contributions towards police facilities would be required to mitigate and manage the impacts arising on community safety, cohesion and policing. The Growth areas reflect the location of existing allocations and potential emerging allocations with capacity of 250+ homes.

Taking the existing ratio of police staff to population in Colchester as the baseline, and assuming that this ratio is maintained going forward (with an average household size of 2.35 people), Essex Police forecast that the 8,375 dwellings located within the identified ‘Growth Areas’ would generate demand for an additional 20.2 officers and supporting infrastructure/ facilities.

Costs, funding and delivery

3.16.10. Essex Police considered the costs associated with the policing needs which might arise in Colchester due to the Emerging Development Trajectory.

3.16.11. Where developers are promoting major new housing developmentsof 250 dwellings or more, it is recommended that the pre-application advice is sought from Essex Police at an early stage, to agree a sustainable level of police facilities provision. Essex Police require additional police facilities demand resulting from development to be funded and/or provided by developers. Any request for S106 or CIL funding would be supported by evidence to identify the need.

3.16.12. The estimated budget for the level of developer funding requirements for the ten 'Growth Areas' across the plan period is £5,484,944 . This sum is included within the Project Schedule. Table 3-31 sets out the developer funding requirements by Growth Area.

Table 3-31 Developer funding requirements for police facilities by Growth Area

Area	Officers	Set-up costs officers	PCSO tasking costs	Vehicles costs	Accommodation costs	Traffic management	Total
Colchester Total	**20.2**	**£242,045**	**£3,955420**	**£143,775**	**£869,704**	**£264,000**	**5,484,944**
North Colchester	0.6	£7,225	£0*	£4,292	£25,961	£24,000	£61,478
East Colchester	4.8	£57,802	£1,166,300	£34,334	£207,691	£24,000	£1,490,126
South Colchester	2.1	£25,288	£466,520	£15,021	£90,865	£24,000	£621,694
Tiptree	1.4	£17,341	£349,890	£10,014	£62,307	£24,000	£463,552
Marks Tey	6.0	£72,252	£1,457,875	£42,918	£259,613	£48,000	£1,880,658
West Mersea	0.7	£8,670	£0*	£5,007	£31,154	£24,000	£68,831
Eight Ash Green	0.6	£7,225	£0*	£4,292	£25,961	£24,000	£61,478
Great Horkesley	1.0	£11,560	£0*	£7,153	£41,538	£24,000	£84,251
Copford	0.7	£8,670	£0*	£5,007	£31,154	£24,000	£68,831
Langham	2.2	£26,011	£524,835	£15,737	£93,461	£24,000	£684,043

Source: Essex Police, (2024).

** Sites I only qualify for PCSO funding when there is capacity for 500 dwellings or more.*

3.16.13. In 2022, data indicated that Essex Police was the second lowest funded force (funding from grants and council tax) per head of population[100]. In the short term, the force is expected to borrow £68.0 m between 2023/24 and 2027/28 for capital investment plans[101].

Summary

3.16.14. Essex Police provides policing services across Colchester. The Colchester Local Plan Area is covered by the Colchester District Policing Area. The baseline police resources within the Local Policing Area are operating at capacity.

3.16.15. There is one police station within Colchester, as well as a British Transport Police station.

3.16.16. Essex Police indicates that both the construction and occupation phases of major new housing developments require additional police infrastructure/ facilities (police facilities) to provide for the necessary community safety, cohesion, and policing to mitigate and manage the crime impacts arising from the increased population.

3.16.17. Essex Police has identified ten 'Growth Areas' within the Emerging Development Trajectory, where sites providing 250+ dwellings would be located which would require additional or enhanced police facilities such as police floor space, police vehicles, accommodation, traffic management facilities, PCSOs during construction, and NPTOs during operation.

[100] His Majesty's Inspectorate of Constabulary and Fire and Rescue Services, (2022); Value for Money Profiles.
[101] Essex Police, (2023); Force Management Statement 2023.

3.16.18. To fund the additional demand on police facilities resulting from the population increase associated with growth, Essex Police will require funding from developers. It is anticipated that the total developer funding requirements for the ten Growth Areas across the plan period will be £5,484,944.

3.17. Ambulance

Baseline

Current provision

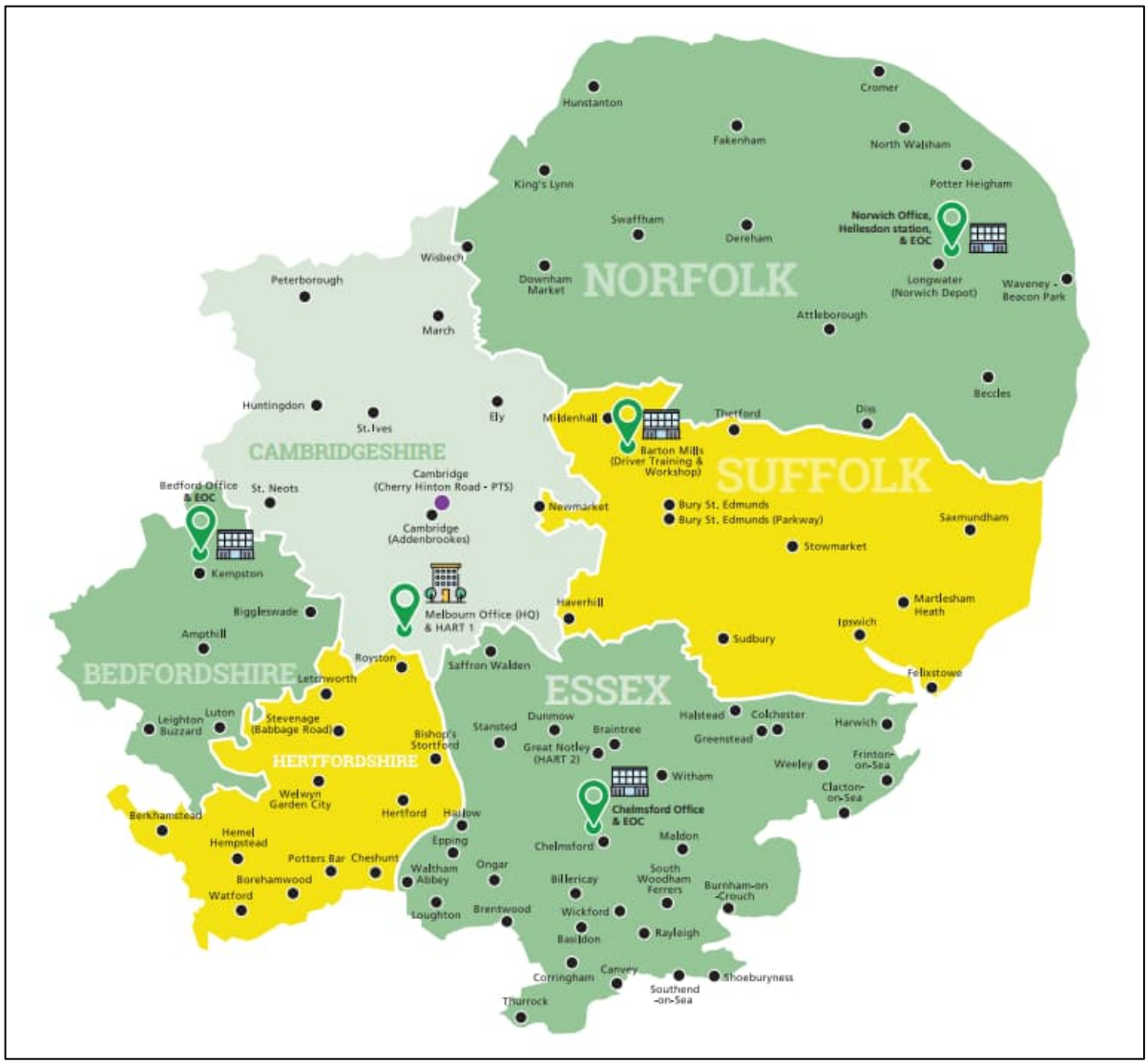
3.17.1. The East of England Ambulance Service (EEAST) provides accident and emergency services, minor injuries services, and where commissioned non-emergency patient transport services across the East of England.

3.17.2. EEAST receives over 1.3 million 999 calls every year and provides care for over half a million patients per year across the region as a whole[102]. EEAST also provides urgent and emergency responses to healthcare professionals requiring ambulance assistance, and inter-facility transfers between hospitals and other healthcare settings. The Non-Emergency Patient Transport Services provided by EEAST give an essential lifeline for people unable to use public or other transport due to their medical condition.

3.17.3. Across the counties which EEAST serves there are three ambulance operation centres (AOCs) which are found in Chelmsford, Bedford and Norwich. The fleet operated by EEAST is comprised of 498 frontline vehicles, 73 rapid response vehicles, 194 non-emergency ambulances; and 51 hazardous response team (HART), major incidents and resilience vehicles[103].

[102] East of England Ambulance Service NHS Trust, (2023); Annual Report and Accounts 2022 – 2023.
[103] East of England Ambulance Service NHS Trust, (2024); About Us. Available at: https://www.eastamb.nhs.uk/about-us

Figure 3-11 EEAST service area



Source: East of England Ambulance Service NHS Trust, (2023); Annual Report and Accounts 2022 – 2023.

3.17.4. 2023/24 EEAST activity in North East Essex is shown in Table 3-32 below.

Table 3-32 EEAST activity in North East Essex, 2023/24

Treatment Type	No. Incidents
Face to Face	50,864
Conveyances	33,049
Hear and Treat	6,036
Community First Responders attendances	1,322

Source: EEAST, January 2025

3.17.5. Within Colchester there are two ambulance stations, located in Colchester town centre and Greenstead. These are shown in Table 3-33 and Figure 3-11.

Table 3-33 Ambulance infrastructure in Colchester

Facility Location	Function	Size (GIA sqm)	Year Built
Colchester	'Make ready' hub where ambulances can be repaired, serviced, stocked and cleaned	428 sqm	1953
Colchester, Greenstead	Ambulance Response Post (ARP)	N/A - leasehold	N/A - leasehold

3.17.6. Neighbouring ambulance stations which will support residents in the Colchester area are located in Braintree, Halstead, Maldon, Sudbury (respose post), Weeley and Witham.

Infrastructure requirements to 2041

3.17.7. EEAST indicated through consultion that a new purpose-built new ambulance hub is required in Colchester to meet current demand, which will support ambulance stations and response posts in the vicinity. EEAST would expect this to be operational for around 30 years.

3.17.8. Ideally, EEAST will also need more ambulance response posts in order to target 90% of the Colchester area in 6-17 minutes; these response posts would all be served by the Colchester hub. Response Posts would be more flexible and likely be leasehold with a life span of 5-10 years (as they would move depending on population growth). EEAST plans to model the exact locations for additional ambulance response posts against the spatial growth option.

3.17.9. The specifications for ambulance hubs and ambulance response posts are summarised in Table 3-34.

Table 3-34 Ambulance infrastructure specifications

Asset type	Description	Specification
Ambulance hub	Key hub location, main operational base	• 1 hectare of land close to local hospital (building circa 2,200 m^2 GIA) • Good road network links • Sufficient space for 34 dual staffed ambulances, 4 rapid response vehicles • Offices • Make Ready centre • Vehicle workshop • Parking for staff vehicles and bicycles • Health and wellbeing garden • Power supply to enable charging of electric ambulance/rapid response vehicles. • Located in Flood Zone 1
Ambulance Service Response Post (ASRP), reporting base	Start and finish location for ambulances, typically more than 30 minutes from the hub. Sometimes located with other emergency services or NHS facility	• Accessible 24 hours a day/seven days a week. • Rest room with access to vehicles within 30 seconds from activation. Ground for is preferred. • Appropriately located to support operational requirements, i.e. enable response times

Asset type	Description	Specification
		• Suitably sized for number and type of vehicles • Welfare facilities, kitchen, rest room, toilets and multi-purpose room • External parking close to building entrance/exit • Staff parking (reporting base only) • External vehicle charging facilities • Digital, radio, Wi-Fi and other telecoms enabled

Source: East of England Ambulance Service NHS Trust, (2024); Ambulance Response Post Specifications.

3.17.10. Generally, EEAST assumes an additional ambulance for every additional 10,000 residents. EEAST identify the requirement for two additional ambulances from 2025 to meet demand from the existing commitments and existing allocations identified within the development trajectory, and an additional two ambulances (the first from 2025 and the second from 2037) to meet demand from the potential emerging allocations.

3.17.11. EEAST also identified the following needs as likely to arise from population growth:

- Additional resources would be required at regional call centres: this could include new technology, digital systems to improve call handling, staff well-being and improvements to patient care (e.g. diagnostics, telematics, auto connections to acute hospitals). There may also be changes in technology which affect how diagnostics/ treatment is provided in future.
- Recruitment, equipment and training of Community First Responders. The skills mix in terms of ambulance staff is likely to increase with more specialised/higher qualified paramedics and EMTs. Training and employment opportunities within the Colchester area could support this development.

Costs, funding and delivery

3.17.12. According to EEAST, building costs of a new hub are in the region of £15m (plus land costs) depending on size and design, plus land costs. No funding is currently committed to the new Hub.

3.17.13. Each Dual Service Ambulance can cost around £140,000 and last for up to 5 years before requiring replacement (these costs do not include servicing, repairs, running costs or fuel). HART vehicles cost more, whilst Rapid Response Vehicles are less.

3.17.14. EEAST indicated potential financial contributions (s106/CIL) which it might seek towards meeting the needs arising from growth to 2041. The estimates are based 2023/24 activity figures and assume on an average household size of 2.2 people, an activity rate of 0.23 incident responses per person per annum, and a contribution of £155 per person or £340 per dwelling.

3.17.15. On this basis, the potential emerging allocations and windfall sites (12,070 homes) generate 6,107 additional incidents per annum and a required contribution of £4.10m.

3.17.16. In addition, EEAST use the benchmark of one additional ambulance and Rapid Response Vechicle per 10,000 residents. Therefore, based the population growth from the potential emerging allocations, an additional two ambulances and Rapid Response Vehicles will be required.

3.17.17. EEAST will apply to NHS England for funding for the new ambulance hub but anticipate that S106/CIL will provide additional funding. Deveoper contributions will also potentially support

establishment of new ambulance response posts, provision of additional ambulances and recruitment / equipment / training of Community First Responders.

3.17.18. EEAST is also contracted to provide Patient Transport Services subject to competitive tender[104]. A capital allocation is provided from Department of Health and Social Care (DHSC) including additional funding for chemical, biological, radiological and nuclear response training.

Summary

3.17.19. East of England Ambulance Service Trust (EEAST) provides the ambulance service in Colchester. There are currently two ambulance stations comprising the Colchester 'make-ready' hub and the Greenstead ARP. Information received during stakeholder consultation illustrates that demand is high and increasing, and the service is strained by handover delays at hospitals impacting on incurred costs.

3.17.20. EEAST indicated that a new purpose-built new ambulance hub is required in Colchester to meet current demand, which will support ambulance stations and response posts in the vicinity. An ambulance hub is expteced to have a lifespan of 30 years. Ideally, EEAST will also need more ambulance response posts in order to target 90% of the Colchester area in 6-17 minutes. EEAST identify the requirement for four additional ambalances from 2025 to meet demand to 2041. Additional resources would also be required at regional call centres, and for recruitment, equipment and training of Community First Responders.

3.17.21. According to EEAST, building costs of a new hub are in the region of £15m (plus land costs) depending on size and design, plus land costs. No funding is currently committed to the new hub. Each Dual Service Ambulance can cost around £140,000.

3.17.22. EEAST indicated that the potential emerging allocations and windfall sites (12,070 homes) would generate 6,040 additional incidents per annum and that developer contributions of £4.06m would be required accordingly.

3.17.23. EEAST will apply to NHS England for funding for the new ambulance hub but anticipate that S106/CIL will provide additional funding. Developer contributions will also potentially support establishment of new ambulance response posts, provision of additional ambulances and recruitment / equipment / training of Community First Responders.

3.18. Fire and rescue

Baseline

Current provision

3.18.1. Essex County Fire and Rescue Service (ECFRS) has responded to consultation on the Stage 3 IADP by preparing an evidence base paper in December 2024 and an Addendum update in July 2025, which have been drawn upon to formulate this chapter.

3.18.2. Essex County Fire and Rescue Service (ECFRS) is responsible for assessing and responding to risks that occur within the Colchester Local Plan area. ECFRS is overseen by the Police, Fire and Crime Commissioner.

3.18.3. ECFRS provides prevention, protection and emergency response services from 51 locations across the county, of which five key assets are located within the Colchester Local Plan area. This includes one wholetime station, three on-call stations and an Urban Search and Rescue (USAR) facility, as shown in Table 3-35 Fire and rescue facilities in Colchester and Figure 3-10.

[104] East of England Ambulance Service NHS Trust, (2024); What we spend and how we spend it. Available at: https://www.eastamb.nhs.uk/about-us/freedom-of-information/what-we-spend-and-how-we-spend-it

Table 3-35 Fire and rescue facilities in Colchester

Facility	Type
Colchester	Wholetime station *1
West Mersea	On-call station
Tiptree	On-call station
Wivenhoe	On-call station
Colchester	Urban Search and Rescue (USAR) *2

Source: Essex County Fire and Rescue Service, (2023); Annual Report and Statement of Assurance 2022 – 2023.

*1 There is a requirement to provide modernised/ expanded fire station facilities, appliances & equipment to address the increased demand arising from planned housing/ population growth, either on an alternative site or by redeveloping the existing site if feasible

*2 There is a requirement for modernised/ expanded training areas/ facilities, appliances & equipment to address the increased demand arising from planned housing/population growth

3.18.4. As of 31st December 2023, ECFRS employed 628 whole time firefighters, 511 on-call firefighters, 42 control firefighters and 353 support staff, as well as specialist officer roles[105]. The service maintains standard pumping appliances and a fleet of specialist vehicles[106].

3.18.5. The baseline fire and rescue service resources within the Colchester Local Plan area are operating at capacity, and would be significantly impacted by the planned housing, population and employment growth envisaged.

3.18.6. The Crime and Disorder Act 1998 (Section 17) requires local authorities to reduce crime and disorder and consider community safety in the exercise of their duties and activities. The NPPF advises that the purpose of the planning system is to contribute to the achievement of sustainable development, incorporating a social objective to support strong, vibrant, and healthy communities by fostering a well-designed and safe built environment. The NPPF requires planning policies and decisions to enable and support healthy lifestyles, especially where this would address local health and wellbeing needs, and promote public safety, including through the layout and design of developments.

Infrastructure requirements to 2041

3.18.7. ECFRS highlight new housing supply (totalling 8,375 dwellings) from ten ‘Growth Areas’: North Colchester, East Colchester, South Colchester, Tiptree, Marks Tey, West Mersea, Eight Ash Green, Great Horkesley, Copford and Langham. These ‘Growth Areas’ are comprised of existing allocations and preferred emerging potential allocations which will deliver 250 dwellings or more giving rise to significant additional resource needs and capacity implications for ECFRS.

3.18.8. Additional demand for fire & rescue infrastructure/ facilities will arise through an increase in the Prevention, Protection, and Response activities, including the increased number of incidents, increased attendance times and changes in the incident risk profile to be mitigated and managed.

3.18.9. To use service capacity effectively, resources are tasked into localities to cover the operational risk in that locality, and to be effective there is a requirement for local hubs or fire stations from which operational crews can be deployed.

3.18.10. Community Safety, Wellbeing and Fire Safety Officers are also focused on localities, and an increase in development would require additional capacity in a specific locality, to meet the increased operational and non-operational demands arising.

3.18.11. The increased risk arising from development within a locality would be managed in line with the three main strands of the service role in mind, as outlined below;

[105] Essex County Fire and Rescue Service, (2023); Strategic Assessment of Risk 2023 – 2024.
[106] Essex County Fire and Rescue Service, (2023); Strategic Assessment of Risk 2023 – 2024.

- Prevention – creating space within fire stations or hubs to prioritise community safety work in conjunction with delivery at home and school visits, including locations to work with partner agencies to reduce fire and road traffic incidents;
- Protection – by carrying out fire safety audits and enforcing fire safety legislation with a focus on education, providing advice and seminars;
- Response – by tasking highly trained personnel, including firefighters, into an area to deal with emergency and non-emergency incidents requiring a fire and rescue facility deployment.

3.18.12. Additional service capacity may be provided in the form of the following fire and rescue facilities:

- Additional or enhanced fire station floor space and facilities, including fit out, refurbishment and extension;
- Fire service plant and equipment, including hydrants, specialised pump/hose appliances, aerial ladder platform appliances, cutters, spreaders, rams, stretchers, lifting air bags, tools, winches, ventilation fans, operational lighting equipment, thermal imaging camera, ladders, dry suits, uniforms, breathing apparatus, defibrillators, first-aid kit, and personal protective equipment (PPE);
- Fire and rescue vehicles, inflatable boats, rescue sled, rescue paths, drones and electric vehicles (EV) charging points;
- Funding for additional staff resources, incorporating the recruitment, training, equipping and tasking of Community Safety, Wellbeing and Fire Safety Officers, and recruitment, training, and equipping of Firefighters.
- The level of demand for each element of fire and rescue infrastructure/ facility set out above would be determined at the pre-application stage in light of the budgetary costs associated with each growth area in Table 3.36 below, and in response to specific proposals for eligible employment development > 500 m2 floorspace .

3.18.13. The capital investment priorities within the Colchester local plan area are summarised below;

- Colchester Fire Station – there is an urgent requirement for land & funding to either provide new fire station facilities on an alternative site, or if feasible, redevelop the existing site to accommodate increased appliances, operational personnel, equipment & welfare space;
- Fleet Workshop Facilities – existing fleet workshops are at capacity & with the anticipated growth in fleet numbers, a new/ or expanded workshop facility is required to maintain appliance availability in the context of increased housing/ population & employment floor space growth;
- Training & Welfare Facilities – the growth in workforce numbers & increased complexity of incidents necessitate investment in enhanced training & operational facilities, comprising modern, integrated spaces for learning simulation & welfare which are vital to maintaining firefighter safety & performance;
- Urban Search & Rescue (USAR) Capabilities – urban growth & development increases the risk of large scale & complex incidents, including structural collapse, hazardous materials & transportation related emergencies, & USAR capabilities/ capacity need to be scaled up accordingly with provision made for new/ expanded training areas & equipment investment to support this highly specialised function;

ECFRS will be reviewing its operational needs in 2025/26, to identify the likely land and budgetary requirments for any capital projects required to deliver increased service capacity in specific locations arising from the planned growth.

Costs, funding and delivery

3.18.14. Major new housing developments give rise to significant additional resource needs and capacity implications for ECFRS, requiring appropriate funding by developers to mitigate and manage the community safety, including engagement to promote community wellbeing and resilience, and the increased incidents arising. ECFRS therefore requires additional fire and rescue infrastructure/ facilities to be funded and/or provided by developers either through S106 Agreements or CIL, or via both approaches where applicable. Any requests for S106 and/or CIL funding would be supported by evidence to identify the need.

3.18.15. The estimated budget for the level of developer funding requirements for the ten 'Growth Areas' across the plan period is £2,931,250. Table 3-36 sets out the developer funding requirements by growth area. The budget is based on a standard charge guideline of £350 per dwelling, and the budget totals are included within the Project Schedule. Developer funding would also be sought to mitigate and manage the impacts arising from eligible employment floorspace >500 m2.

Table 3-36 Estimated developer funding requirements for fire and rescue infrastructure/ facilities arising from proposed Growth Areas

Growth Areas	Budget Estimate
North Colchester	£87,500
East Colchester	£700,000
South Colchester	£306,250
Tiptree	£210,000
Marks Tey	£875,000
West Mersea	£105,000
Eight Ash Green	£87,500
Great Horkesley	£ 140,000
Langham	£ 315,000
Copford	£105,000
Total Developer Funding	**£ 2,931,250**

Source: Essex County Fire and Rescue Service, (2024).

3.18.16. In 2023/24, the majority of ECFRS expenditure was related to firefighter and staff pay. Around £11.8 million (13%) was related to premises and equipment[107].

3.18.17. The fire authority is primarily funded through Council Tax collections, reflecting around 60% of funding[108]. Total income from government grants was budgeted at £8.3 million for 2023/24, comprised of Business Rates Relief grant, Services Grant and Firelink Grant (which will be phased out over a five year period).

Summary

3.18.18. ECFRS provides fire and rescue services across the Colchester Local Plan area. Within the local authority area, there are five stations: one wholetime station, three on-call stations, and one Urban Search and Rescue hub. The baseline fire & rescue resources are currently operating at capacity .

3.18.19. ECFRS highlight new housing supply (totalling 8,375 dwellings) from ten 'Growth Areas', comprising existing allocations and preferred emerging potential allocations which will deliver 250 dwellings or more, will give rise to significant additional resource needs and capacity implications for ECFRS.

[107] Police Fire and Crime Commissioner for Essex, (2023); Precepts 2023/24.
[108] Essex County Fire and Rescue Service, (2023); Annual Report and Statement of Assurance 2022 – 2023.

3.18.20. Additional demand for fire & rescue infrastructure/ facilities will arise through an increase in the Prevention, Protection, and Response activities, including the increased number of incidents, increased attendance times and changes in the incident risk profile to be mitigated and managed.

3.18.21. Additional service capacity may be provided in various forms including additional or enhanced fire station floor space and facilities; fire service plant and equipment; fire and rescue vehicles; funding for the recruitment, training, equipping and tasking of l community safety, wellbeing and fire safety officers, and recruitment, training and equipping of firefighters.

3.18.22. ECFRS estimate that developer funding of £2,931,250 is required to meet the requirements of housing and population growth arising from the ten growth areas to 2041. Any requests for S106 and/or CIL funding would be supported by evidence to identify the need.

3.18.23. ECFRS will be reviewing its operational needs in 2025/26, to identify the likely land and budgetary requirments for any capital projects required to deliver increased service capacity in specific locations arising from the planned growth.

3.19. Primary care (GPs)

Baseline

Current provision

3.19.1. The Suffolk and North East Essex (SNEE) Integrated Care Board (ICB)[109] is the key delivery partner for primary care in Colchester. The ICB is responsible for the commissioning of primary care services including GPs, dental services, Community Services and some specialised hospital services.

3.19.2. The SNEE ICB has delegated some authority to three health and wellbeing alliances. Of relevance to Colchester, the North East Essex Health and Wellbeing Alliance[110] is a collaboration of commissioners, providers, Voluntary, Community, and Social Enterprise sector (VCSE) and other systems partners.

3.19.3. The SNEE Integrated Care System (ICS)[111] is one of the 42 ICSs across England. It operates as a local partnership bringing health and care organisations together to develop shared plans and joined-up services across North East Essex, Ipswich and East Suffolk and West Suffolk. It is noted that as part of government reform for the NHS, a restructure is being planned.

3.19.4. The ICB recognises that General Practitioners (GPs or family doctors) providing primary care remain the first point of contact for many people seeking health services. Primacy Care Networks (PCNs) are crucial to effective long-term planning of primary care, ensuring that primary health and care services are integrated and respond to the needs of local populations[112].

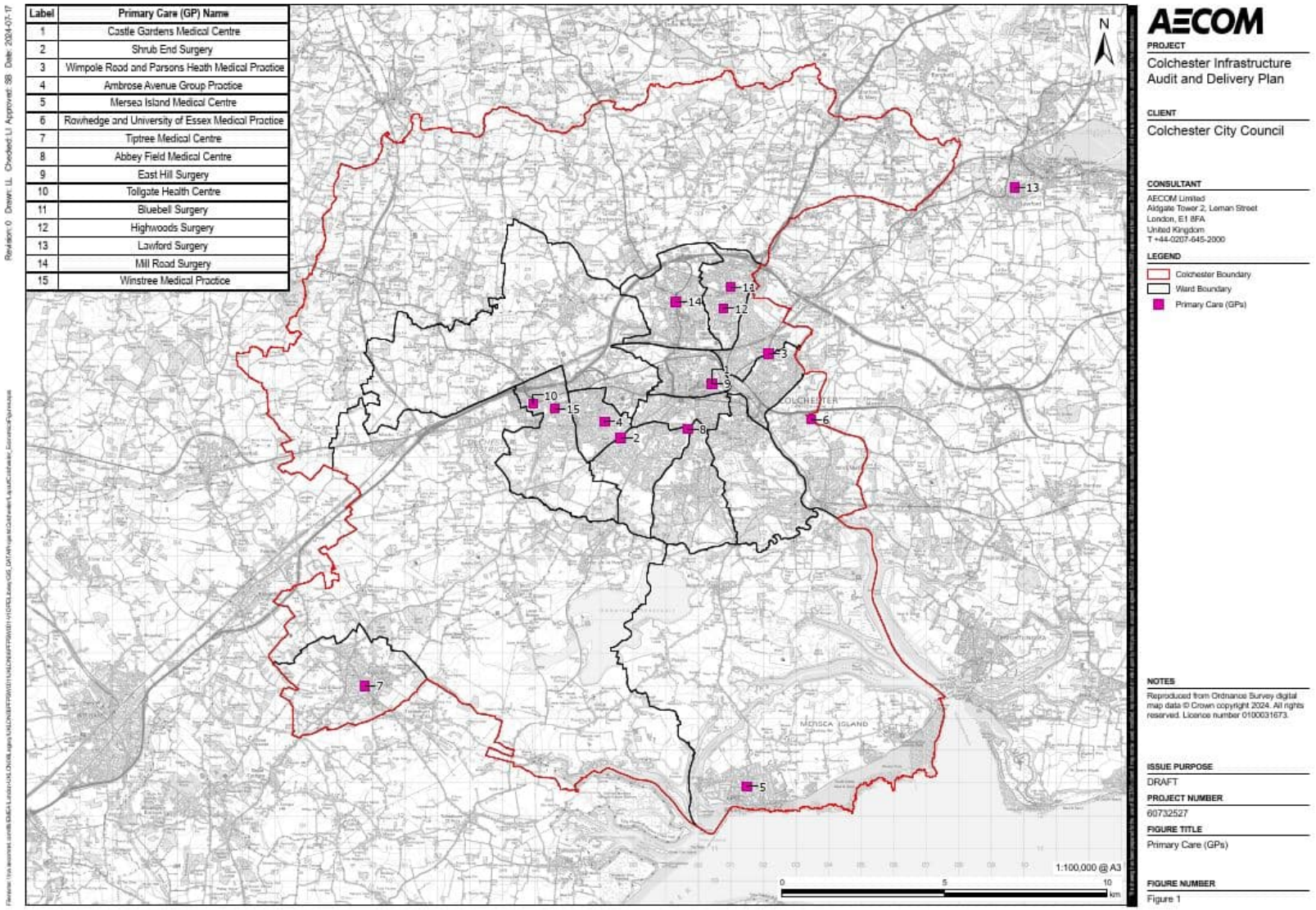
3.19.5. There are eight PCNs operating 35 medical practices (including branch surgeries) in Colchester, as presented in Figure 3-12 below. These include:

- COLTE Partnership PCN, which includes:
  - Ardleigh Surgery;
  - Colne Medical Centre;

[109] https://suffolkandnortheastessex.icb.nhs.uk/ Accessed June 2024
[110] https://www.sneeics.org.uk/working-together/working-together-in-place-based-alliances/north-east-essex-alliance/ Accessed June 2024
[111] https://www.sneeics.org.uk/ Accessed June 2024.
[112] https://www.sneeics.org.uk/wp-content/uploads/2023/10/15427-SNEE-ICB-Joint-Forward-Plan-2023-2028-PROOF_20.pdf Accessed June 2024

  - Mersea Island Practice;
  - Riverside Health Centre;
  - Rowhedge Surgery;
  - Tiptree Medical Centre; and
  - Walton Medical Centre.
- Tendring PCN, which includes:
  - Great Bentley Surgery;
  - Mayflower Medical Centre; and
  - St James Surgery.
- Clacton PCN, which includes:
  - East Lynne Medical Centre;
  - Fronks Road;
  - Harewood Surgery;
  - North Clacton Medical Group;
  - Old Road Surgery; and
  - Thorpe Surgery.
- Ranworth PCN, which includes:
  - Caradoc Surgery;
  - Clacton Community Practices; and
  - Ranworth Surgery.
- Colchester Medical Practice PCN, which includes the following group of Colchester Medical Practices
  - Castle Gardens Medical Centre;
  - Shrub End Surgery;
  - Wimpole Road; and
  - Parsons Heath Medical Practice.
- North Colchester PCN, which includes:
  - Bluebell Surgery;
  - Highwoods Surgery;
  - Lawford Surgery;
  - Mill Road Surgery; and
  - Winstree Medical Practice.
- Abbey Fields PCN, which includes:
  - Abbey Field Surgery;
  - Ambrose Avenue (Joined 01/03/25);
  - East Hill Surgery; and
  - Tollgate Health Centre.
- Creffield Medical Group, which includes:
  - Creffield Medical Centre -West Bergholt, Nayland branch surgeries; and
  - Turner Road Surgery.

Figure 3-12 Primary care provision (GPs) across Colchester



3.19.6. The Stage 1 and 2 IADP Report summarises existing service capacity at each of primary care providers, based on Full-Time Equivalent (FTE) GP numbers and practice patient lists. Every GP surgery within Colchester has a GP:patient ratio above the 1,800 people per one FTE GP standard contained within guidance from the Royal College of GPs[113]. This indicates that there are more patients per GP than the guidance recommends. No data is available for Mersea Island Medical Centre, however CCC indicated in August 2024 that the practice is not currently taking new patients.

3.19.7. The Essex and Suffolk Joint Strategic Needs Assessments (JSNA) indicates that the following NHS North East Essex CCG/ICB parameters have declined over the period 2018-2023[114]:

- Percentage of respondents who had a positive experience with their GP – 79.1% in 2018 and 72.2% in 2023; and
- Percentage of respondents reporting a good overall experience of making an appointment – 62.3% in 2018 and 55.5% in 2023.

3.19.8. The Joint Forward Plan (2023-2028)[115] of the SNEE ICS notes that demand for health and care services is rising and the following drivers will have implications for service demand across the SNEE area to 2028:

- Population growth, with an increasing proportion of residents aged over 75;
- The prevalence of multimorbidity (people with more than two illnesses or diseases), correlated with the growth in the older population;
- Ongoing cost of living challenges which increase need for targeted support and services; and
- The impact of the shift from emergency financial regimes (installed as part of the response to Covid-19) to 'normal' funding levels.

3.19.9. The Joint Forward Plan - Estates (2023-2028)[116] of the SNEE ICS states that services have been commissioned for the development of PCN estates strategies.

3.19.10. The Future Shift SNEE ICS Strategy[117] (2025) sets out the future direction of SNEE ICS. Key themes include a focus on the prevention of illness and delivering more holistic neighbourhood-based care through the following partners:

- GPs;
- Integrated Neighbourhood Teams;
- The Voluntary, Community, Faith and Social Enterprise Sector;
- Residential and domiciliary care;
- Allied Health Professionals; and
- Advanced practice.

3.19.11. SNEE ICB indicated that the publication of the 10 Year Health Plan in July 2025[118] provides a direction of travel to enable a greater shift in improving life expectancy, tackling health inequalities and focusing on prevention. Though there are no identified timescales to move to a new model able to provide continuous, accessible and integrated care, work continues.

[113] https://www.gov.uk/government/publications/new-homes-fact-sheet-4-new-homes-and-healthcare-facilities/fact-sheet-4-new-homes-and-healthcare-facilities
[114] https://data.essex.gov.uk/dataset/e7k7m/jsna-clinical-care-experience-of-care-dashboard Accessed June 2024
[115] https://www.sneeics.org.uk/wp-content/uploads/2023/10/15427-SNEE-ICB-Joint-Forward-Plan-2023-2028-PROOF_20.pdf Accessed June 2024
[116] https://www.sneeics.org.uk/wp-content/uploads/2024/01/15427-SNEE-ICB-Joint-Forward-Plan-2023-2028-eSTATES_20-3.pdf Accessed June 2024
[117] SNEE ICS, (2025); Future Shift SNEE ICS Strategy. Available at: Future Shift - Suffolk & North East Essex Integrated Care System
[118] Fit for the Future: 10 Year Health Plan for England (July 2025) https://www.gov.uk/government/publications/10-year-health-plan-for-england-fit-for-the-future Accessed July 2025

The core components of a new care model will be through three main shifts in the models of care provided across the health service:

- Hospital to community;
- Analogue to digital; and
- Sickness to prevention.

3.19.12. The focus on prevention will mean that access to appropriate care will be;

- As local as it can;
- Digitally enabled;
- In a person's home/place of residence where possible;
- In a neighbourhood health centre (NHC) when needed; and
- Only in hospital if necessary.

3.19.13. This means that the focus on having GP practices located in new developments will be replaced with a more financially sustainable model ensuring a digital first approach and looking more holistically at community level, utilising our community pharmacies to support the management of long-term conditions, linking them to digital patient records.

3.19.14. To ensure a joined-up neighbourhood health and care team model, it is necessary for the ICB to have an agreed 'core' estate where multiple support services can come together to provide a 'single front door' for communities, ensuring easier access and support working towards enabling multidisciplinary teams to operate at least 12 hrs a day and 6 days a week. This will maximise best value and offer social value for the public sector through co-location. This is key for the next phase of integrated neighbourhood and place team development.

3.19.15. In NE Essex, the core estate is identified as the Fryatt Hospital in Harwich, Clacton Hospital in Clacton, the Turner Road Primary Care Centre in Colchester and the Heart of Greenstead community and wellbeing campus in Colchester. Although this does not prevent new estate or work to existing estate elsewhere from happening, the approach of the partners will be that the four identified sites must be considered as a first location for use by all health, care and wellbeing service providers working across NE Essex.

Infrastructure requirements to 2041

3.19.16. The Greenstead Community Hub (which will include a new GP surgery and pharmacy) is set to be completed in March 2026[119]. £18.2 million of funding has been secured through the Government's Towns Fund, which will fund the hub and other projects.

3.19.17. During engagement undertaken for the Stage 1 and 2 report, SNEE ICB indicated that work is underway on a delivery strategy for the TCBGC. The TCBGC Infrastructure Study estimates a requirement for (equivalent of) 10 GPs and 1,650 sqm overall but notes that a more detailed and accurate assessment of the requirement and a strategy for provision formulated in due course. There is a need to explore provision of flexible community hub spaces where health and wellbeing teams deliver primary and secondary care including mental health, and where services such as schools, libraries, and health and wellbeing services could be co-located. In effect therefore the TCBGC DPD takes a pragmatic approach to the need for additional primary health care floor space, recognising that onsite provision will be required but allowing for a degree of flexibility on potential delivery solutions.

3.19.18. In July 2025, SNEE ICB provided feedback on the development trajectory in terms of the demand for primary care services to 2041 and potential projects which could cater for increased demand. Nine capital projects have been identified as set out below. The proposals are based on current knowledge and strategic planning; all schemes brought

[119] https://www.colchester.gov.uk/heartofgreenstead/ Accessed June 2024

forward will be subject to NHS business case and governance processes and may be subject to change.

- Reconfiguration of Barfield Road Clinic to provide additional clinical capacity and improve building functionality;
- Potential expansion of Tiptree Medical Practice including remodelling and refurbishment to provide additional administrative space. Existing administrative space to be remodelled and reconfigured into clinical space to increase capacity;
- Potential expansion of the existing practice at the Rowhedge University Site including remodelling and refurbishment to increase clinical capacity;
- Internal remodelling at Highwoods to create additional clinical capacity;
- Internal remodelling at Ardleigh to create additional clinical capacity;
- Internal remodelling at Creffield to create additional clinical capacity;
- Potential front extension at CMP Shrub End to increase clinical capacity;
- Internal remodelling at CMP Parsons Heath to create additional clinical capacity; and
- Internal remodelling at Tollgate and/or Ambrose to create additional clinical capacity.

3.19.19. Other comments provided by SNEE on the strategy for meeting demand to 2041 are summarised below:

- Potential demand arising, based location and scale of growth associated with the potential emerging allocations and the existing allocations, was considered in the context of Primary Catchment Areas.
- Options for creating additional clinical capacity and space were identified, in terms of both internal configuration to better use existing space and expansion of existing facilities. S106 would be an important funding source for these projects.
- Opportunities were identified to share more services within a PCN, and to provide flexible, bookable space for various services and providers. There is an aspiration for a shared infrastructure approach through a joined up neighbourhood health and care team model.
- SNEE aim to hold strategic discussions with partners, in particular with Mid and South Essex ICB, regarding growth in certain locations. These discussions will need time to take place but will be important to ensure the strategy for these localities is robust and has longevity.
- The SNEE ICBB note that flexibility is central to the decision-making process, as new healthcare service provision needs to take account of longer-term population trends, financial pressures and staggered receipt of Section 106 contributions[120].
- It is acknowledged that NHS clinical models are shifting towards more progressive and adaptable modes (e.g. greater emphasis on digital first solutions and the rollout of the Additional Roles Reimbursement Scheme). The implications of these newer clinical models on future primary care demand are currently unquantified[121].

3.19.20. During engagement undertaken for the Stage 1 and 2 report, SNEE ICB indicated that work is underway on a delivery strategy for the TCBGC. The TCBGC Infrastructure Study estimates a requirement for (equivalent of) 10 GPs and 1,650 sqm overall but notes that a more detailed and accurate assessment of the requirement and a strategy for provision formualted in due course. There is a need to explore provision of flexible community hub spaces where health and wellbeing teams deliver primary and secondary care including mental health, and where services such as schools, libraries, and health and wellbeing services could be co-located. In effect therefore the TCBGC DPD takes a pragmatic approach to the need for additional primary health care floor space, recognising that onsite

[120] SNEE ICS service provider engagement, July 2024
[121] SNEE ICS service provider engagement, July 2024

provision will be required but allowing for a degree of flexibility on potential delivery solutions.

Costs, funding and delivery

3.19.21. Costs and funding were identified by SNEE ICB in relation to three of the capital projects set out above. In the absence of confirmed costs for all projects from SNEE ICB, a high-level benchmarking activity has been conducted utilising published data from the neighbouring ICB, Norfolk and Waveney ICB[122]. Norfolk and Waveney ICB used the Healthy Urban Development Unit (HUDU) model to estimate demand and costs for primary care, acute care services, and mental health services. The average contribution required towards healthcare per home was estimated to be £4,333.

3.19.22. Applying the benchmark cost of £4,333 per home to the potential emerging allocations and windfall dwellings (12,070 dwellings) provides an indicative cost of £52,299,310 for primary care, acute care services, and mental health services to 2041.

3.19.23. Funding sources for primary care services include business-as-usual money (capital funding, noting that this is very limited) and Section 106 developer contributions.

Summary

3.19.24. The Suffolk and North East Essex (SNEE) Integrated Care Board (ICB) is responsible for the commissioning of primary care services in Colchester including GPs, dental services and some specialised hospital services.

3.19.25. There are eight PCNs operating 35 medical practices in Colchester. As of December 2023, all medical practices are operating above capacity, based on the 1:1,800 national standard (1 FTE GP to 1,800 patients).

3.19.26. Demand for primary care is set to increase due to population growth, the aging of the population, the increasing prevalence of multimorbidity, and ongoing cost of living challenges. Challenges include the number of primary care vacancies (specifically GP, nursing and pharmacy roles) and the scale and nature of the estate required to meet current and future forecast care needs.

3.19.27. To ensure a joined-up neighbourhood health and care team model, in line with the 10 Year Health Plan (July 2025) it is necessary for the ICB to have an agreed ‘core’ estate where multiple support services can come together to provide a ‘single front door’ for communities, ensuring easier access and support working towards enabling multidisciplinary teams to operate at least 12 hrs a day and 6 days a week. In NE Essex, the core estate is identified as including the Turner Road Primary Care Centre in Colchester and the Heart of Greenstead community and wellbeing campus in Colchester.

3.19.28. Capital schemes already in the pipeline include the Greenstead Community Hub (which will include a new GP surgery and pharmacy). SNEE ICB is also working on a delivery strategy for healthcare facilities as part of the TCBGC.

3.19.29. SNEE ICB identified a further nine capital projects to help accommodate demand for new primary healthcare facilities to 2041.

3.19.30. A high-level benchmarking exercise indicates that the cost of providing primary care, acute care services, and mental health services associated with the potential emerging allocations would be £52.3m.

[122] Norfolk and Waveney ICB, (2024); ‘Planning in health engagement protocol - Norfolk and East Suffolk Local Planning Authorities, the Norfolk and Waveney ICB, Health Partners and Public Health Norfolk and Public Health Suffolk, August 2024. See Annex C. Available at: https://www.breckland.gov.uk/media/21633/The-Planning-in-Health-Protocol/pdf/Planning_in_Health_Protocol_2024_ICB_v1.1.pdf?m=1745593007910

3.20. Acute care services

Baseline

Current provision

3.20.1. East Suffolk and North Essex NHS Foundation Trust (ESNEFT) (a merger of the previous Colchester Hospital University NHS Foundation Trust and Ipswich Hospital NHS Trust) is responsible for the provision of hospital and community health care services across Colchester, Ipswich, and smaller local areas in their catchment.

3.20.2. The current lead commissioning group is the SNEE ICB, responsible for planning and commissioning NHS-funded healthcare for Colchester's residents.

3.20.3. ESNEFT partner with North East Essex (NEE) Community Services[123] to provide community care and nursing for housebound patients in Colchester.

3.20.4. Hertfordshire Partnership University NHS Foundation Trust provide talking therapies and learning disability services in North Essex. Their services and locations are primarily covered in the mental health section below, but also relevant here as some community services are provided out of their site at Lexden Hospital in Colchester.

3.20.5. Acute care facilities within the local authority area comprise:

- Colchester Hospital – an NHS hospital with services delivered by ESNEFT, covering a catchment population of approximately 350,000 people with approximately 4,500 staff; and
- Oaks Hospital – a private hospital specialising in orthopaedics, general surgery, ophthalmology, cosmetic surgery, oncology and urology, which is run by independent healthcare provider Ramsay Health Care UK.

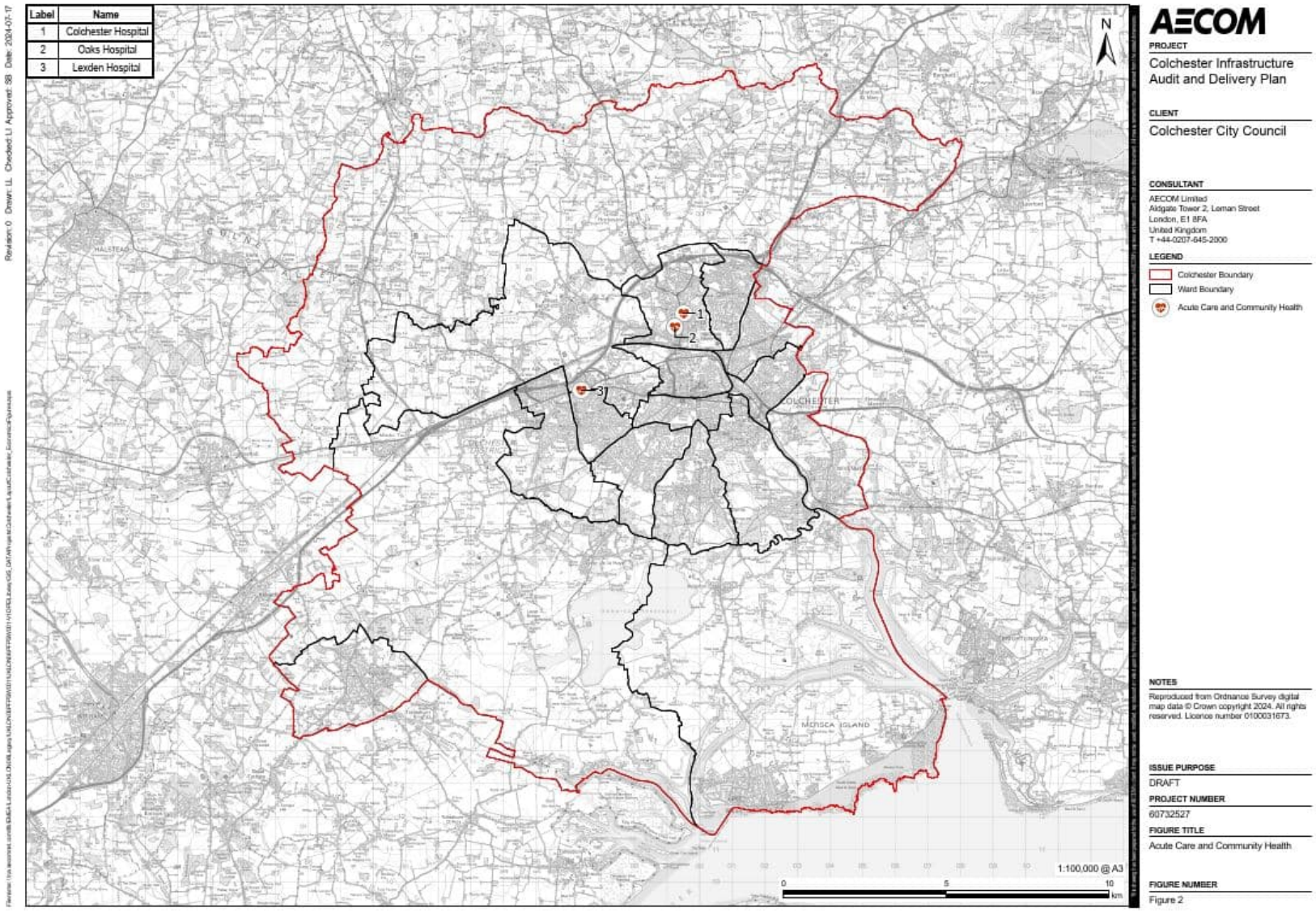
3.20.6. Community care provision by ESNEFT and partners in Colchester[124] is delivered at:

- Lexden Hospital, Colchester[125] - a community services and learning disabilities hospital, providing mental health capacity and rehabilitation, managed by Hertfordshire Partnership University NHS Foundation Trust;
- Care at Home provided by North East Essex Community Services, a collaboration with a number of providers including ESNEFT in patients' homes;
- Community care in a variety of locations including at Colchester Hospital, and in smaller therapy and community support centres in Colchester including Mill Road Therapy Centre, Greenstead Community Centre, Portland Road Medical Centre, and the Turner Road Primary Care Centre;
- Older people's community care services through the "Attend Anywhere" clinics – virtual clinics held by ESNEFT consultants in patients' own homes and within 21 care homes in the Colchester and Tendring area; and
- Sexual health services delivered by Provide, a partnership of organisations including ESNEFT at the Maria Clinic, and by the Cambridgeshire Community Services NHS Trust in partnership with the Terrence Higgins Trust.

3.20.7. Colchester's three main acute care and community facilities are presented in Figure 3-13, noting that as mentioned above community care services are also provided within smaller centres, care homes and patients' homes.

[123] Community Nursing - North East Essex Community Services (neecommunity.org.uk) Accessed June 2024
[124] https://www.esneft.nhs.uk/service/community-services-in-north-east-essex/ Accessed June 2024
[125] https://www.hpft.nhs.uk/services/find-our-services/essex/colchester/ Accessed June 2024

Figure 3-13 Acute care and community health facilities across Colchester



3.20.8. In terms of acute and community care services, the SNEE ICS states that the following challenges exist[126]:

- Increased demand for health and care services due to rising population twinned with people living longer,
- The complexity of needs has increased significantly, with higher rates of mental ill-health, dementia and obesity,
- Patients with mental health needs are spending significantly longer in emergency departments, particularly at Colchester Hospital, waiting for appropriate services,
- In-patient bed base is under significant pressure at both acute hospitals in Colchester, with emergency patients having significantly more complex care needs and staying longer in beds than ever before,
- The numbers of people waiting for elective and cancer care has risen significantly following the Covid-19 pandemic,
- Staff retention issues, and
- The need to deliver cost improvements and the added risk with the system-level assessment of revenue and capital performance.

3.20.9. In addition, the SNEE ICS states that the following capacity-related challenges exist for acute and community care[127]:

- Community: demand for home-based care has risen significantly post-pandemic
- Outpatient capacity: the ICS is delivering up to 110% of pre-pandemic first outpatient appointments. Despite this, the number of patients waiting for treatments continues to rise.
- Diagnostic capacity: further capacity is required in endoscopy and MRI.
- Beds: the ICS is consistently using around 120 escalation beds (of which around 90 are at Colchester) – the equivalent of over four extra wards.
- Theatres: theatre utilisation is significantly higher than pre-pandemic levels but is not yet consistently at the 85% national goal. Further theatre and post-operative capacity will support reduction in long waits for treatment. There are also opportunities to increase the proportion of procedures carried out in outpatient clinics and as day cases.

Future Baseline including planned schemes

3.20.10. ESNEFT plans to invest £150 million in its 'big build' capital project scheme over the next five years across all its hospitals.

3.20.11. In 2024, the Dame Clare Marx Building (Elective Orthopaedic Centre) was delivered at Colchester Hospital. This includes eight theatres, a 16-bed Post Anaesthesia Care Unit (PACU) Stage 1, three 24-bed inpatient wards, a diagnostic imaging suite and associated facilities. A new wellbeing garden was also delivered.

3.20.12. This following committed capital works are yet to be delivered and are set out in the Project Schedule:

- Endoscopy Unit at Colchester Hospital[128] – a new unit that will offer a dedicated, purpose-built space (the service currently shares a space with day surgery in Elmstead Unit), upgraded facilities and a better environment and experience for

[126] https://esneft-1f835.kxcdn.com/wp-content/uploads/2023/12/ESNEFT-Clinical-strategy-2024-accessible-version-2024-2029.pdf Accessed June 2024
[127] https://esneft-1f835.kxcdn.com/wp-content/uploads/2023/12/ESNEFT-Clinical-strategy-2024-accessible-version-2024-2029.pdf Accessed June 2024
[128] https://www.esneft.nhs.uk/your-visit/building-work-information-for-visitors/building-work-at-colchester-hospital/endoscopy-unit-move/ Accessed June 2024

patients, and more capacity to better manage waiting lists and reduce patient waiting times. Project costs are £16 million, anticipated opening in 2025.

- Electrical Infrastructure Upgrade Programme at Colchester Hospital – Phase 5 of 7 – the purpose of this programme is to allow for continual use of hospital[129].
- Day Surgery Unit (DSU) relocation at Colchester Hospital[130] – the relocation and development of the DSU will create a more modern facility at Colchester Hospital. Patients that attend hospital for day case procedures will go the DSU. Project costs are currently unknown, anticipated delivery expected after the opening of the Dame Clare Marx building.

3.20.13. The ESNEFT Clinical Strategy (2024-29)[131] states that the following capital schemes will be delivered over the next five years:

- Delivery of virtual wards to support over 100 patients who would otherwise have been in hospital,
- Develop new endoscopy capacity to meet growing demand, and
- Develop post-operative care units (POCU).

3.20.14. During consultation on this Stage 3 Report, ESNEFT advised that the above projects meet current acute healthcare needs only or would not add capacity for the hospital to address additional demand. Therefore, they would not accommodate needs arising from planned growth to 2041.

Infrastructure requirements to 2041

3.20.15. The Emerging Development Trajectory was shared with ESNEFT as part of the Stage 3 IADP engagement programme.

3.20.16. In response, ESNEFT indicated that it will undertake a modelling exercise to identify the acute healthcare infrastructure requirements needed to serve the population growth arising from the housing development proposed to 2041. This exercise will identify costs and funding gaps to inform the IADP. It is anticipated this work will inform subsequent submissions as preparation of the IADP progresses.

3.20.17. ESNEFT emphasised that principle of principle of securing capital funds for acute healthcare infrastructure via planning obligations is supported by planning policy and case law. The response also reiterated the lack of capacity within existing acute and secondary healthcare infrastructure and services in Colchester, which demonstrates that mitigation will be required to meet the needs of the new population arising from planned growth to 2041.

Costs, funding and delivery

3.20.18. As outlined in Section 3.19, a high-level benchmarking exercise has been conducted which estimates the combined healthcare costs for primacy care, acute care services, and mental health services as totalling £52.3m. This exercise drew on evidence from Norfolk and Waveney ICB[132], which used the Healthy Urban Development Unit (HUDU) model to derive an average contribution required towards healthcare per home of £4,333.

3.20.19. In the absence of estimates of demand and costs from ESNEFT itself, this cost has been used within the Project Schedule.

[129] ESNEFT service provider engagement, June 2024
[130] https://www.esneft.nhs.uk/your-visit/building-work-information-for-visitors/building-work-at-colchester-hospital/day-surgery-unit-dsu-move/ Accessed June 2024
[131] ESNEFT, (2024); ESNEFT Clinical Strategy 2024/29. Available at: 021123-Item-4.12-Appendix-1-ESNEFT-CLINICAL-STRATEGY-24-29-5.pdf. Accessed July 2025
[132] Norfolk and Waveney ICB, (2024); 'Planning in health engagement protocol - Norfolk and East Suffolk Local Planning Authorities, the Norfolk and Waveney ICB, Health Partners and Public Health Norfolk and Public Health Suffolk, August 2024. See Annex C. Available at: https://www.breckland.gov.uk/media/21633/The-Planning-in-Health-Protocol/pdf/Planning_in_Health_Protocol_2024_ICB_v1.1.pdf?m=1745593007910

3.20.20. ESNEFT receives approximately £600 million of capital funding to operate its services, pay staff and maintain its estates each year[133]. The majority of this funding is from the ICB, with the remaining funds sourced from the national NHS.

3.20.21. Via consultation, ESNEFT emphasised that S106 payments from developers would be an important funding source for acute healthcare infrastructure to 2041, which was justified by existing planning policy and case law.

Summary

3.20.22. East Suffolk and North Essex NHS Foundation Trust (a merger of the previous Colchester Hospital University NHS Foundation Trust and Ipswich Hospital NHS Trust) is responsible for the provision of hospital and community health care services across Colchester. The current lead commissioning group is the SNEE ICB. ESNEFT partner with North East Essex (NEE) Community Services to provide community care and nursing for housebound patients in Colchester, and with Hertfordshire Partnership University NHS Foundation Trust provide talking therapies and learning disability services in North Essex.

3.20.23. Acute care facilities within the local authority area comprise Colchester Hospital and Oaks Hospital. Community care provision by ESNEFT and partners in Colchester is delivered at Lexden Hospital as well as within smaller centres, care homes and patients' homes.

3.20.24. The SNEE ICS describe existing capacity challenges across a number of service areas including in-patient beds and diagnostics.

3.20.25. There are six acute healthcare schemes in the Project Schedule including the Endoscopy Unit, an electrical infrastructure upgrade and the Day Surgery Unit at Colchester hospital.

3.20.26. A high-level benchmarking excerise indicates that the cost of providing primary care, acute care services, and mental health services associated with the potential emerging allocations would be £52.3 million.

3.21. Mental health services

Baseline

Current provision

3.21.1. Mental health services in Colchester are delivered by the Essex Partnership University Trust (EPUT). The NHS also comissions mental health services from the voluntary and private sector.

3.21.2. EPUT delivers services at the following locations in the local authority area:

- Colchester and Tendring Specialist Mental Health Team – 35 East Stockwell Street, Colchester;
- Acute Adult Inpatient Service – Colchester Hospital;
- Children's Learning Disability Service – Holmer Court, Essex Street, Colchester;
- North East and West Essex Adult ADHD Assessment Service - Holmer Court, Essex Street, Colchester (administration only);
- North East Essex Adult Autism Spectrum Disorder (ASD) Service - Holmer Court, Essex Street, Colchester (administration only);
- Op COURAGE: The Veterans Mental Health and Wellbeing Service – The Lakes Mental Health Unit, Turner Road, Colchester;
- Dementia Intensive Support Team – King's Wood Centre, Turner Road, Colchester;

[133] https://www.esneft.nhs.uk/about-us/how-we-work/our-funding/#:~:text=ESNEFT%20funding,more%20complicated%20care%20or%20treatment. Accessed June 2024

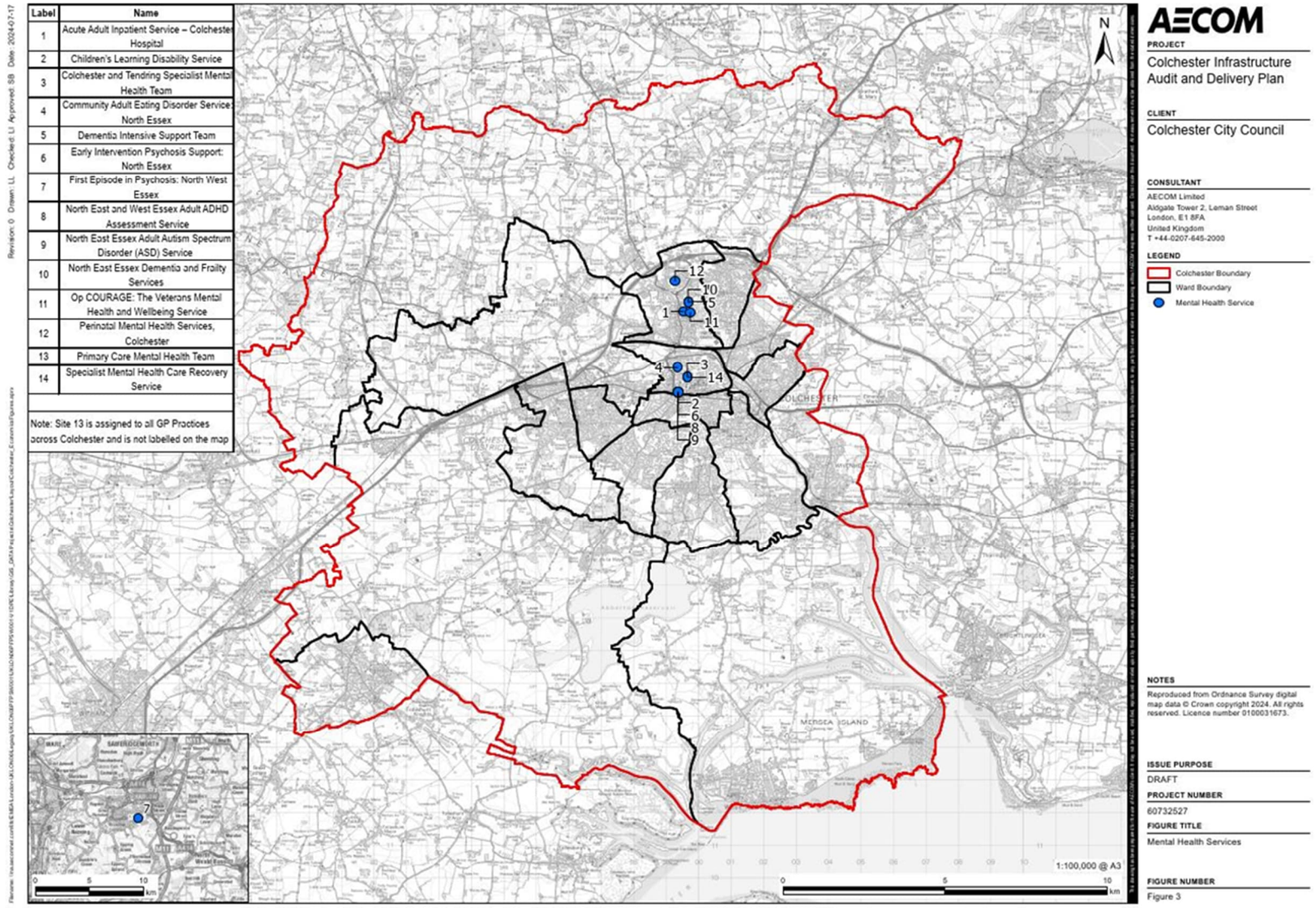
- Community Adult Eating Disorder Service: North Essex – The Northgate Centre, North Station Road, Colchester;
- Early Intervention Psychosis Support: North Essex – Holmer Court, Essex Street, Colchester;
- North East Essex Dementia and Frailty Services - King's Wood Centre, Turner Road, Colchester;
- Perinatal Mental Health Services, Colchester - Severalls House, 2 Boxted Road, Mile End, Colchester;
- Primary Care Mental Health Support Team – GP practices across Colchester;
- Specialist Mental Health Care Recovery Service - Herrick House, 35 East Stockwell Street, Colchester; and
- Therapy for You North East Essex, providing support over the telephone only.
- Mental Health Joint Response Vehicle - joint service run by EPUT and EEAST providing direct provision via the Emergency Call Centre within EEAST for people in crisis with the view to prevent emergency admission to hospital.
- The Sanctuary - Colchester High Street (provided by Mid and North Essex Mind Services).

3.21.3. EPUT delivers the following service outside the local authority area:

- First Episode in Psychosis: North West Essex – services for North East Essex provided at the Latton Bush Centre, Harlow.

3.21.4. The facilities outlined above are presented in Figure 3-14.

Figure 3-14 Mental health services across Colchester



3.21.5. The Colchester Specialist Mental Health Team (CSMHT) form part of EPUT and are responsible for providing assessment and treatment of individuals who are registered locally with a GP and are experiencing a Serious Mental Illness (SMI). The CSNHT is a multi-disciplinary team comprising mental health nurses, occupational therapists, social workers, psychiatrists and support workers.

3.21.6. EPUT's Strategic Plan (2023-28)[134] states that mental health services are encountering the following key challenges:

- Increased demand for EPUT's services – demand driven by Colchester's ageing population twinned with national trends showing a 39% increase in mental health referrals for children and young people between 2020/21 and 2021/22;
- Levels of deprivation – accelerated by an increase in the number of those challenged by the cost-of-living crisis and the aftermath of the Covid-19 pandemic;
- Long waits for therapy and intervention;
- Significant workforce pressures including on recruitment and retention across the NHS;
- Community mental health services and community physical health services are not always integrated;
- Data and information is fragmented; and
- A non-statutory Independent Inquiry has been established to look into the circumstances of mental health inpatient deaths across NHS Trusts in Essex.

3.21.7. EPUT's Strategic Plan (2023-28) states that the following opportunities exist for mental health services, to:

- Strengthen EPUT's work with people and communities who use its services;
- Lead the integration of services across Southend, Essex and Thurrock;
- Embed a culture of learning and safety;
- Make changes to release more time to care for frontline staff;
- Redesign EPUT's staffing model;
- Take advantage of the latest innovation and research;
- Make better use of digital technology and data; and
- Expand collaborative arrangements with other organisations.

3.21.8. Over the period 2023-24, EPUT invested £16.2 million on capital expenditure, of which £11.1 million was directed at the following schemes: patient safety, health and safety backlog maintenance projects, the Electronic Patient Record Project, the Electronic Prescribing and Medicines Administration (EPMA), digital equipment upgrades and other improvements to the Estate. The remaining £5.1 million was directed at ward refurbishment projects, of which The Lakes Mental Health Hospital in Colchester benefitted[135].

Infrastructure requirements to 2041

3.21.9. Population growth is likely to lead to an increase in demand for mental health services. However at this stage no planned capital projects or investment requirements to meet growth to 2041 have been identified.

3.21.10. EPUT's Strategic Plan (2023-28)[136] indicates that EPUT are producing an Estates Strategy that will ensure that the estate is fit for purpose and meets the aspirations of EPUT's Strategy.

[134] https://eput.nhs.uk/media/0eqnbd02/eput-nhs-strategic-plan-2023-2028.pdf Accessed June 2024
[135] https://eput.nhs.uk/media/lxlbormh/eput-annual-report-2023-2024-final.pdf Accessed June 2024
[136] https://eput.nhs.uk/media/0eqnbd02/eput-nhs-strategic-plan-2023-2028.pdf Accessed June 2024

3.21.11. In terms of future demand for mental health services, it is anticipated that the Estates Strategy will indicate where capital investment is most needed to accommodate future changes in demand for EPUT's services[137].

3.21.12. EPUT is exploring options for accommodating two voluntary and community sector partner organisations in EPUT premises to help those organisations reduce their operating costs and to maximise impact[138].

Costs, funding and delivery

3.21.13. As outlined in Section 3.19, a high-level benchmarking exercise has been conducted which estimates the combined healthcare costs for primacy care, acute care services, and mental health services totalling £52.3m.

3.21.14. During 2023-24, EPUT invested £16.2 million on capital expenditure, of which £3.3 million was funded from the Department of Health Public Dividend Capital[139].

3.21.15. It is anticipated that funding information for future mental health assets/schemes will be made available once EPUT's Estates Strategy is published.

Summary

3.21.16. Mental health services in Colchester are delivered by the Essex Partnership University Trust (EPUT). A range of services is delivered including the Specialist Mental Health Team, Acute Adult Inpatient Services at Colchester Hospital, and the Children's Learning Disability Service.

3.21.17. EPUT's Strategic Plan (2023-28) states that mental health services are encountering challenges relating to increased demand for EPUT's services, driven by Colchester's ageing population twinned with increased mental health referrals for children and young people; an increase in the number of those challenged by the cost-of-living crisis and the aftermath of the Covid-19 pandemic; and significant workforce pressures.

3.21.18. Future needs for mental healthcare are likely to increase with population growth to 2041, though no defined projects to meet this need have been identified to date. A high-level benchmarking excerise indicates that the cost of providing primary care, acute care services, and mental health services associated with the potential emering allocations would be £52.3m.

3.22. Adult social care

Baseline

Current provision

3.22.1. Adult Social Care is designed to assist those with care and support needs, and help with disabilities, including providing equipment to support independent living and to provide support to carers[140]. Adult Social Care in Colchester is coordinated and commisioned by ECC and is provided by private and third sector service providers.

3.22.2. In total, there are 48 care homes within Colchester, of which 35 operate within the built-up city area. The current provision of care homes for both working age and elderly persons within the local authority area is presented in Table 3-37 and Figure 3-15.

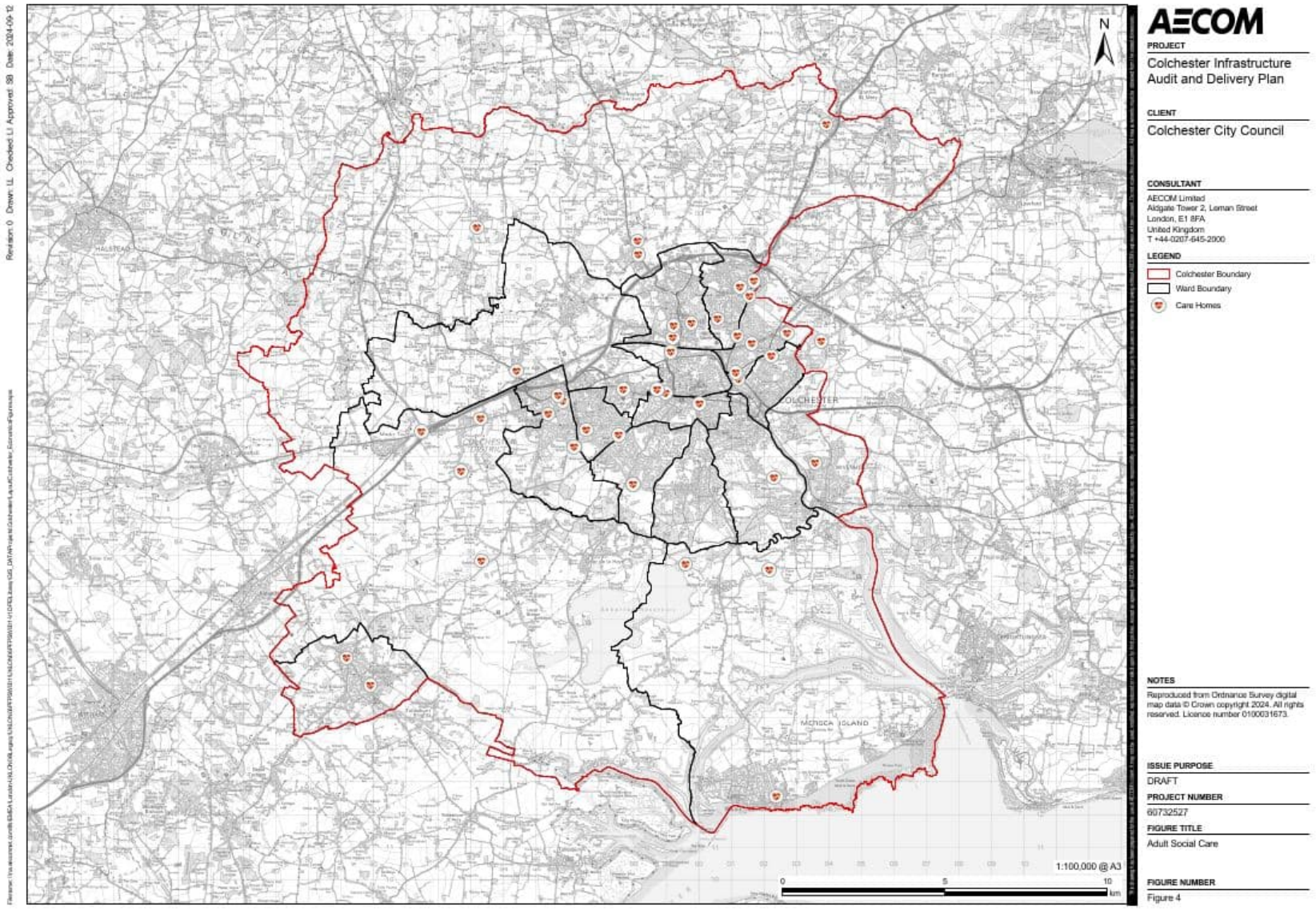
[137] https://eput.nhs.uk/media/lxlbormh/eput-annual-report-2023-2024-final.pdf Accessed July 2024
[138] https://eput.nhs.uk/media/lxlbormh/eput-annual-report-2023-2024-final.pdf Accessed July 2024
[139] https://eput.nhs.uk/media/lxlbormh/eput-annual-report-2023-2024-final.pdf Accessed July 2024
[140] https://www.essex.gov.uk/sites/default/files/2023-09/Guide-to-adult-social-care-2023.pdf Accessed June 2024

Table 3-37 Provision of care homes by settlement across the local authority area

Settlement	Care home / facility
Colchester	481 Ipswich Road CO4 0HQ, Maven Healthcare
	Alderwood Care Home, CO1 1ZP
	ASN Assertive Outreach and Consultancy Limited, CO3 3SR
	At Your Service (AYS) Care Limited, CO4 3BU
	Butterfly's Care Home, Parsons Heath, CO4 3JE
	Carebase Limited, CO1 1ZP
	Colonia Court – support for those in need of nursing, residential or dementia care, CO4 3AN
	Consensus Support Services Limited, CO4 9PE
	Crouched Friars Residential Home, CO3 3HA
	Duncannons = 6 bed care home for adults with a learning disability, autism and complex needs, CO7 7SF
	Essex Care Consortium, Plume Avenue, CO3 4PG
	Ewer Court, CO2 7ED
	Friends of the Elderly, New Copford Place Care Home, CO6 1YR
	Inclusive Support, Dugard Avenue, CO3 9EH
	Loganberry Lodge – residential care home with 141 bed capacity, New Farm Road, CO3 0PG
	Maple Cottage, Amber Court, CP2 9GE
	Maple House, Amber Court, CP2 9GE
	Maple Lodge, Amber Court, CP2 9GE
	Maple Manor, Amber Court, CP2 9GE
	Maple View, Amber Court, CP2 9GE
	Milton Lodge Retirement Home, Ipswich Road, CO4 0ES
	Myland House, Mile End Road, CP4 5BU
	Newlands, Ipswich Road, CO4 9HB
	Progressive Mews, Halstead Road, CO6 3QH
	St Fillans Care Home, St Fillans Road, CO4 0PT
	St Helena Hospice – respite services, CO4 9JU
	Stanway Green Lodge – residential care home, Stanway Green, CO3 0RA
	Stanway Villa, Nursery Close, CO3 0RL
	Tall Trees, Mile End Road, CO4 5XR
	The Haven – registered care home, Harwich Road, CO4 3BS
	The Oaks Care Home (Lexden) – care home for 61 older people who require residential or nursing support, Oaks Drive, CO3 3PR
	Tudor House, London Road, CO3 0NR
	Welshwood Manor – independently owned nursing and residential care home, CO4 3HZ
	Woodland View Care Home, Turner Road, CO4 5JR
	Z (Setting Up) Cleaveland Lodge, Rowhedge Road, CO2 8EJ

Settlement	Care home / facility
Abberton	Abberton Manor Nursing Home, CO5 7NL
Birch	Essex Care Consortium, Maldon Road, CO2 0NU
Copford Green	Springfield Limited, Rectory Road, CO6 1DH
Dedham	Blackbrook House, CO7 6HP
Fingringhoe	Aveley Lodge, CO5 7AS
Horkesley Heath	Great Horkesley Manor, Nayland Road, CO6 4ET
	Kacee Lodge, Ivy Lodge Road, CO6 4EN
Marks Tey	Essex Care Consortium, Laurels Station Road, CO6 1EE
Tiptree	43a and 43b Morley Road, CO5 0AA
	Henderson and Harvard, Kelvedon Road, CO5 0LJ
West Mersea	Aldeburgh House, CO5 8BX
Wivenhoe	Nationwide Community Care Limited, Cracknell Close, CO7 9PY
Wormingford	Jameson's RCH, Wormingford Road, CO6 3NS

Figure 3-15 Current provision of care homes across Colchester



3.22.3. ECC co-ordinates provision of the following adult social care services:

- Domiciliary care services[141] – includes a range of services that are put in place to support an adult to remain in their home. This service predominantly caters to needs of elderly individuals. Often this involves the support of a carer on a variety of tasks such as personal care, administering medications or supporting with activities provided over a short- or long-term basis. Over the 2023/24 period 6,476 adults were funded by ECC to receive care in a residential setting.
- Working aged residential care - a service that supports an adult with learning disabilities and/or autism and physical and sensory impairments on a long-term basis. This includes both short and long-term residential placements and short term or respite services[142]. Over the 2023/24 period 1,023 adults were funded by ECC to receive care in a residential setting.

3.22.4. The average cost of adult social care is £1,945.24 per week per person[143].

3.22.5. ECC notes that current issues for adult social care include[144]:

- Market supply of working aged residential care is rated 'low' as of March 2024
- Just 75% of domiciliary care services and 80% of working aged residential care services have Care Quality Commission (CQC) ratings of either 'good' or 'outstanding' in Essex
- Whilst market supply of domiciliary care across Colchester is good, there have been some capacity challenges in rural areas such as Manningtree and Mersea.

3.22.6. ECC highlights that strengths and/or opportunities for adult social care include:

- 'Good' market supply of domiciliary care services across Essex as of March 2024
- There is 89% occupancy in working age residential care settings, and 55% occupancy for ECC funded adults in working age residential care settings, indicating some spare capacity.

3.22.7. Current areas of focus for domiciliary care services (predominantly elderly care) across ECC include:

- The design of the future Live at Home contractual model and arrangements. The current Live at Home model is set to expire in 2025. This provides an opportunity for existing domiciliary care providers in Essex to share honest feedback on the existing contractual arrangement with ECC and enables those providers to help shape the future service[145].
- The Essex Workforce, Training and Retention Strategy – to ensure increased capacity is maintained[146].

3.22.8. Current areas of focus for working age residential care across ECC include to develop the provision of more specialist complex care accommodation to meet the needs of people with complex needs, including Postural Stability Instruction (PSI)[147].

[141] https://www.essexproviderhub.org/the-essex-market/market-position-statement/community-based-markets/domiciliary-care/ Accessed June 2024
[142] https://www.essexproviderhub.org/the-essex-market/market-position-statement/residential-care-market/working-aged-residential/ Accessed June 2024
[143] https://www.essexproviderhub.org/the-essex-market/market-position-statement/residential-care-market/working-aged-residential/ Accessed June 2024
[144] https://www.essexproviderhub.org/the-essex-market/market-position-statement/locality-based-commissioning/north-east-essex/ Accessed June 2024
[145] https://bidstats.uk/tenders/2023/W45/810156329 Accessed June 2024
[146] https://www.essexproviderhub.org/the-essex-market/market-position-statement/community-based-markets/domiciliary-care/ Accessed June 2024
[147] https://www.essexproviderhub.org/the-essex-market/market-position-statement/residential-care-market/working-aged-residential/ Accessed June 2024

Infrastructure requirements to 2041

3.22.9. ECC does not own and operate adult social care facilities but rather commissions services from external providers. ECC will implement a market shaping strategy to ensure that facilities and services are adequate and effective.

3.22.10. The ECC Adult Social Care Business Plan 2024-2030[148] states that demand for social care support continues to grow, with particular growth in new demand on mental health and wellbeing services. There is increasing evidence of high complexity of needs and increasing longevity of those with high complexity. Backlogs in elective care and NHS waiting lists are also affecting social care. There has been a significant increase in demand on safeguarding referrals. About 1 in 6 people in Essex has a long-term health problem or disability and those with a learning disability who need social care support is likely to go up by 8% by 2030.

3.22.11. Population increase to 2041 can be expected to further increase demand for Adult Social Care, especially given that the proportion of older people in Colchester is growing. The ECC Developer Contributions Guide (2024) notes that new residential development will generate a need for care and support, over time, from residents. ECC currently has a focus on development of specialist supported living schemes for adults with complex learning disabilities and autism and development of new extra care schemes primarily for older people. Essex Housing LLP, wholly-owned by ECC, has an active development programme and growing pipeline for such schemes.

3.22.12. To estimate demand for adult social care associated with the potential emerging allocations population increase (28,399 residents), a high-level benchmarking activity has been conducted utlising published standards from The Housing Learning and Improvement Network[149]. The following ratios were applied to the projected population for over 75s (2,816) arising from the potential emerging allocations:

- 45 Nursing Home places per 1,000 persons over 75
- 65 Residential Care places per 1,000 persons over 75
- 25 Extra Care places per 1,000 persons over 75

3.22.13. Based on the standards above, the adult social care demand from residents to 2041 is estimated to require 127 additional nursing homes places, 183 residential care places, and 70 additional extra care places.

Costs, funding and delivery

3.22.14. The total cost for providing an additional place is £170,000 for nursing homes, £135,000 for residential care facilities, and £150,000 for extra care housing[150]. Applying these costs to the benchmarking figures above, the indicative costs for adult social care services to 2041 is £56,817,660.

3.22.15. As noted above, adult social care homes are typically provided by the private or third sector, though health and social care services can be provided at community facilities provided and operated by the NHS or local authorities.

3.22.16. The ECC Developer Contributions Guide indicates that ECC will liaise with Local Planning Authorities to inform planning policy and consider how opportunities for new Supported and Specialised Housing (SSH) can be realised on sites with significant housing development. This includes consideration of private sector SSH under market tenures, and the need to deliver affordable housing tenures under SSH typologies. Where this new accommodation

[148] https://www.essex.gov.uk/sites/default/files/2024-05/Adult%20Social%20Care%20Business%20Plan%202024%20to%202030.pdf Accessed January 2025
[149] The Housing Learning and Improvement Network, (2008); Demand levels based prevalence rates from "More Choice, Greater Voice". Available at: https://www.housinglin.org.uk/_assets/resources/housing/support_materials/reports/mcgvdocument.pdf [Accessed 24/07/25].
[150] Source: AECOM cost consultants 2025. Cost are at current day prices and exclude professional fees, contingency and specialist medical equipment.

cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

3.22.17. In 2024/25, ECC estimate expentiture on Adult Social Care services to be £2.21m per day. Health, Adult Social Care and ICS Integration account for 32.3% of its total expenditure on services.[151] The ECC Adult Social Care Business Plan 2024-2030[152] notes that the forecast annual net budget requirement is set to grow over the period 2024/25-2027/28, this is not affordable within the Council's estimated funding over that period given that the council is facing significant budget pressures and financial uncertainties. ECC's expenditure is funded through council tax, business rates and government grants.

Summary

3.22.18. In total, there are 48 care homes within Colchester, of which 35 operate within the built-up city area.

3.22.19. ECC co-ordinates and commissions provision of Adult Social Services, including domiciliary care services (which includes a range of services to support an adult to remain in their home) and working aged residential care (a service that supports an adult with learning disabilities and/or autism and physical and sensory impairments on a long-term basis).

3.22.20. Population increase to 2041 can be expected to increase demand for adult social care, especially given that the proportion of older people in Colchester is growing. The projected population for over 75s arising from potential emerging allocations is 2,816 and it is anticipated that 127 additional nursing homes places, 183 residential care places, and 70 additional extra care places will be required.

3.22.21. Care homes and other facilities are largely provided through private and third sector providers, although health and social care services can be provided at community facilities operated by the NHS or local authorities.

3.22.22. A high level benchmarking excerise indicates that the cost of providing adult social care services associated with the potential emerging allocations would be £56.8m.

3.22.23. Where there is evidence of need and where feasible within masterplans, ECC's preference is for large-scale development to deliver a proportionate provision of Specialist and Supported Housing (SSH) for predicted care and support needs arising. ECC will liaise with Local Planning Authorities to consider how opportunities for SSH can be realised on sites with significant housing development. Where this new accommodation cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

3.23. Specialist and supported facilities for children

Baseline

Current provision

3.23.1. Children's social care[153] provides support to children, young people and families. Essex County Council (ECC) note that these support services are divided into four different levels based on differing levels of need, ranging from

- Level 1 (universal services / open-access services) to Level 4 (specialist intervention).

[151] Council tax information leaflet 2024 to 2025 Accessed Jan 2024
[152] https://www.essex.gov.uk/sites/default/files/2024-05/Adult%20Social%20Care%20Business%20Plan%202024%20to%202030.pdf Accessed January 2025
[153] https://www.essex.gov.uk/children-young-people-and-families/children-and-young-peoples-health-and-wellbeing-services Accessed June 2024

3.23.2. Children and young people are defined as persons aged 0-18 years, and this definition is extended to the age of 25 where the relevant persons are care experienced or have special educational needs or disabilities (SEND).

3.23.3. ECC has a statutory duty under child protection law to meet children and young people's care needs and the needs of looked after children. This includes a duty to be corporate parents for looked after children and care experienced children up the age of 25. Looked after children include a nationally allocated quota of lone child asylum seekers, for which ECC has to also assume social care duties.

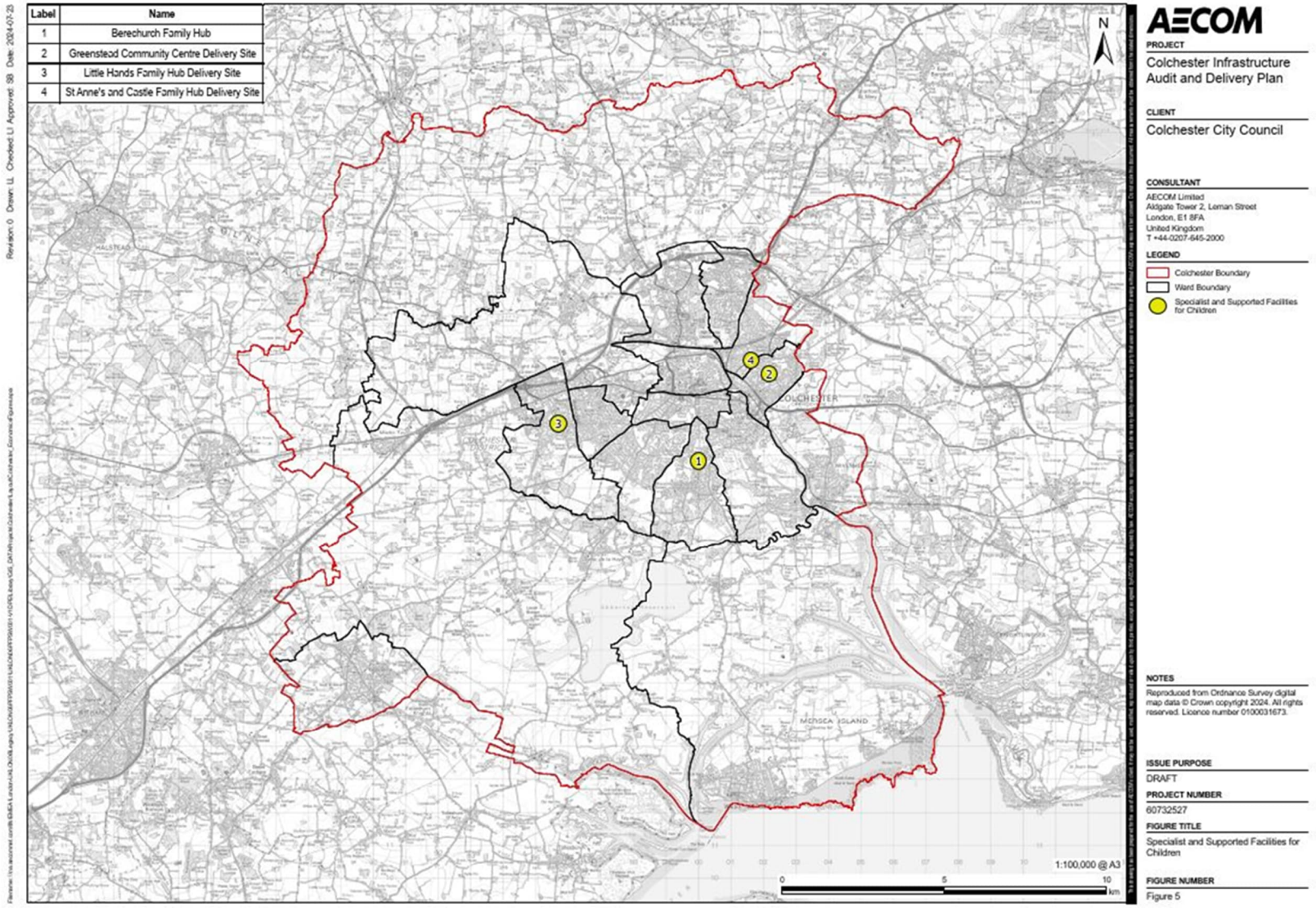
3.23.4. ECC has commissioned the Essex Child and Family Wellbeing Service (ECFWS)[154]. The ECFWS is comprised of a 'family care hub' service that is delivered by HCRG Care Group[155] in partnership with Barnardo's Children's Charity[156] across Essex. ECFWS's services for children from pre-birth to 19 years of age (or up to 25 for those with SEND and those who are care experienced) include[157] Healthy Child programmes, SEND support, and Children in Care and Safeguarding Services. The ECFWS operates from the following family care hub and associated delivery sites[158]:

- Berechurch Family Hub;
- Greenstead Community Centre Delivery Site;
- St Anne's and Castle Family Hub Delivery Site; and
- Little Hands Family Hub Delivery Site.

3.23.5. ECFWS facilities listed above are presented in Figure 3-16.

[154] Essex Child and Family Wellbeing Service (ECFWS) Accessed June 2024
[155] https://www.hcrgcaregroup.com/ Accessed June 2024
[156] https://www.barnardos.org.uk/ Accessed June 2024
[157] https://essexfamilywellbeing.co.uk/about-us/what-we-do/ Accessed June 2024
[158] https://essexfamilywellbeing.co.uk/hubs/berechurch-family-hub/ Accessed June 2024

Figure 3-16 Current provision of Essex Child and Family Well-being Service facilities



3.23.6. ECC also provides the following services and the latest Market Position Statement notes that the following supply/demand balances for each[159]:

- Fostering – low supply, high/very high demand, ambition to increase supply;
- Supported accommodation – low supply, high/very high demand, ambition to increase supply;
- Registered children's homes – good supply, high demand, ambition to increase supply;
- Home-based care for children with disabilities – good supply, high demand, ambition to increase supply;
- Overnight short breaks for families and children – good supply, high demand, ambition to manage supply; and
- Short break community clubs and activities - good supply, high demand, ambition to manage supply.

3.23.7. The Market Position Statement notes that over the last 5 years the Council has seen a growth in demand in care for Children in Care by 10%.

Infrastructure requirements to 2041

3.23.8. Population growth will lead to an increase in the number of children aged 0 to 25 living in Colchester and therefore in the demand for children's services and associated facilities. To estimate demand for specialist and supported facilities for children associated with the potential emerging allocations population increase (28,399 residents), a high-level benchmarking activity has been conducted utilising published standards from Milton Keynes City Council (2025)[160]. A ratio of 7.7 children social care bed setting per 1,000 dwellings has been applied to the projected population resulting in an estimated demand for 219 children social care beds up to 2041.

3.23.9. It is likely that Colchester will require new family centres (or expansion of existing ones) as locations for service delivery. Children's services could be delivered from multi-use community hubs which are increasingly a preferred model of provision; here, a range of services can be accessed at once and space can be used flexibly.

3.23.10. It is also likely that population growth will lead to an increased requirement for children's accommodation in terms of both supported housing and registered childrens homes. The ECC Developers Guide indicates that where there is evidence of need and where feasible within masterplans, ECC's preference is for large-scale development to deliver a proportionate provision of Specialist and Supported Housing (SSH) for predicted care and support needs arising. Where this accommodation cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

Costs, funding and delivery

3.23.11. The cost per children's home bed/placement is £206,408[161]. Applying this cost to the benchmarking figure above, the indicative cost for specialist and supported facilities for children to 2041 is £45,135,560.

3.23.12. While some children's services can be provided at community facilities provided and operated by the NHS or local authorities, supported accommodation for children is typically provided by the private or third sector.

3.23.13. The ECC Developer Contributions Guide indicates that ECC will liaise with Local Planning Authorities to inform planning policy and consider how opportunities for new Supported and

[159] https://www.essexproviderhub.org/children-s-services/children-s-services-market-position-statement/ Accessed June 2024
[160] Source: Milton Keynes Infrastructure Study and Strategy, Initial Assessment interim Report, May 2024. https://www.milton-keynes.gov.uk/sites/default/files/2024-07/Milton%20Keynes%20Infrastructure%20Study%20%26%20Strategy%2C%20Infrastructure%20Study%20-%20Initial%20Assessment%20Interim%20Report.pdf
[161] Source: Milton Keynes City Council (2025)

Specialised Housing (SSH) can be realised on sites with significant housing development. Where this new accommodation cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

3.23.14. Children's Services and Early Years account for 14.6% of ECC's total expenditure on services[162] (£367.1m, approximately £976,000 per day). ECC's expenditure is funded through council tax, business rates and government grants.

3.23.15. SNEE ICB and the Start Well Domain have provided grants to local projects, to help deliver emotional wellbeing and mental health early support in Colchester between 2023-25. These projects include[163]:

- Bridgeway Mission (Colchester) – a safe and supportive network for children refugees and their families;
- Changing Lives (Colchester) – free physical activity and mental health sessions;
- Kids Inspire (Colchester) – talk together provides tailored support from early intervention to complex and extremely complex needs from 0-18, up to 25 years of age with SEND and their families;
- Underdog Crew (Colchester) – free training for young adults with lived experiences of mental health issues, autism and neurodiversity through employability skills and film making.

Summary

3.23.16. ECC has a statutory duty under child protection law to meet children and young people's care needs and the needs of looked after children.

3.23.17. ECC has commissioned the Essex Child and Family Wellbeing Service (ECFWS), which operates 'family hubs', to deliver services from a number of sites. ECC also provides childrens services including supported accommodation, registered children's homes, home-based care for children with disabilities, overnight short breaks for families and children, and short break community clubs and activities. Demand for these services is high. Children's Services and Early Years currently account for 14.6% of ECC's total expenditure on services[164] (£367.1m, approximately £976,000 per day).

3.23.18. Population growth will lead to an increase in the number of children aged 0 to 25 living in Colchester and therefore in the demand for children's services and associated facilities. This implies a likely need for additional space within family centres or alternative community hubs. It is also likely that population growth will lead to an increased requirement for children's accommodation in terms of both supported housing and registered childrens homes.

3.23.19. A high-level benchmarking exercise indicates that there will be a demand for approximately 219 additional children social care beds up to 2041 associated with the potential emerging allocations, and that the cost of providing these beds would be £45.1m.

3.23.20. The ECC Developers Guide indicates that where there is evidence of need, ECC's preference is for large-scale development to deliver a proportionate provision of Specialist and Supported Housing (SSH) for predicted care and support needs arising. Where this accommodation cannot be provided on-site, ECC will liaise with LPAs to secure financial contributions that enable capital funding for new SSH accommodation on alternative sites.

3.23.21. ECC's expenditure on children's services is funded through council tax, business rates and government grants. SNEE ICB and the Start Well Domain have provided grants to local

[162] Council tax information leaflet 2024 to 2025 Accessed Jan 2024
[163] https://www.esneft.nhs.uk/service/childrens-services-community-paediatrics/support-in-colchester-and-tendring/ Accessed June 2024
[164] Council tax information leaflet 2024 to 2025 Accessed Jan 2024

projects, to help deliver emotional wellbeing and mental health early support in Colchester between 2023-25.

4. Infrastructure assessment: transport

4.1. Introduction

4.1.1. This section covers needs arising for active travel infrastructure, public transport (buses and rail), roads and electric vehicle investment to 2041, building on the baseline analysis and engagement with providers described in the Stage 1 and 2 IADP Report.

4.1.2. Further consultation has been carried out as part of Stage 3 with the Local Transport Authority (LTA); National Highways (NH); Network Rail; the Sub-Regional Transport Body (SRTB); and public transport operators Greater Anglia (rail), and Arriva, First Bus Essex, and Headingham and Chambers (bus). Responses with further information have been received from Essex County Council (the LTA) and National Highways.

4.1.3. Strategic modelling has been undertaken, which has provided information on impacts arising from proposed growth. The modelling concluded in mid 2025, though it should be noted that the work will be subject to further iterations and refinement as the Local Plan progresses towards adoption. The modelling has been used to assess mitigation needs and develop a comprehensive package of measures to inform the IADP. This process is detailed further in Section 4.2.

4.2. Strategic Modelling

4.2.1. In Stage 1 and 2 no transport modelling was available to inform the inputs of the IADP. In absence of these outputs, the extent to which the planned projects met forecast demand could not be ascertained, nor could additional infrastructure be set out or the need quantified. This was also a significant limitation to the feedback of stakeholders.

4.2.2. Strategic transport modelling was completed in mid 2025 and has informed this iteration of the IADP. This section sets out the methodology that was followed and outlines how the modelling outputs were incorporated in the report and the Project Schedule.

4.2.3. The model was updated to include Local Plan growth. Reference case schemes, i.e. committed or funded infrastructure projects likely to be delivered independently of the Local Plan, were added to the model to provide a realistic future baseline. Larger reference case schemes are referred to in the relevant sections of the transport chapter.

4.2.4. The modelling quantified the additional impact of Local Plan growth beyond core and background issues. This analysis helped to isolate the impacts attributable to the Local Plan growth.

4.2.5. A proportionate mitigation package was then developed. This is referred to in the IADP as the 'Local Plan growth mitigation package'. This followed a vision-led approach, prioritising the delivery of sustainable transport interventions first, including active travel and public transport improvements. Where these measures alone did not sufficiently mitigate the impacts, targeted highway interventions were added iteratively until residual impacts were brought within acceptable levels. All measures identified at this stage remain high level and will require further refinement through additional modelling and design development.

4.2.6. Sensitivity tests were undertaken to understand the robustness of the mitigation package. These tests assessed how the package performed with the inclusion or exclusion of key reference case schemes, such as the A120–A133 Link Road and the A12 Junctions 19–25 improvement. The results of these tests are discussed in further detail in Section 4.6 on road-based schemes.

4.2.7. Based on the modelling outputs and sensitivity testing, two indicative mitigation scenarios were developed: a ‘High Sustainability’ package and a ‘Low Sustainability’ package. The ‘High Sustainability’ scenario reflects a greater scale and ambition relating to sustainable travel investment, and includes a greater number of schemes relating to active travel than the ‘Low Sustainability Scenario’. Both scenarios are referenced throughout this report; for the purposes of summarising total instructure costs in Chapter 0, the High Sustainability scenario is used. As the IADP develops further, it is anticipated that measures from each package will be taken forward to form the final iteration of the IADP.

4.2.8. The preferred mitigation package was costed using benchmarked rates. These cost estimates are high level and do not reflect detailed scheme design. With regard to funding, costs were apportioned between reference case developments, Local Plan sites, and potential external funding sources. As the design and modelling evolve, these estimates will be subject to refinement. Future iterations of modelling and design work will inform more detailed costings.

4.2.9. The mitigation measures have informed the sub-section on ‘infrastructure requirements to 2041’ for each transport mode in this report. Both the estimated costs and suggested funding splits are reflected in the Project Schedule and have replaced the indicative measures and costs included in previous IADP iterations.

4.2.10. Further detail on the modelling approach and the modelled impacts of Local Plan growth can be found in the modelling report entitled: Colchester Local Plan Review: Further Transport Evidence (Summer 2025).

4.3. Active travel

Baseline

Current provision

4.3.1. Active travel covers walking, cycling and wheeling infrastructure. There is extensive walking provision in Colchester totalling over 500km made up of footpaths, bridleways, restricted byways, and byways. These routes are legally protected for public use and include notable trails such as The Colchester Orbital, a 14-mile loop around the city, and the King Charles III England Coastal Path, which currently extends from Tilbury to Salcott-cum-Virley and is set to expand.

4.3.2. In addition to formal walking networks, Colchester's pedestrian infrastructure also includes the pavements, crossings, and supporting infrastructure that enable walking and wheeling across the area. While some severance issues exist, the network generally meets current demand as infrastructure is geographically widespread and can accommodate further growth. Improving the quality of walking infrastructure remains a priority to enhance its appeal for short-distance travel and encourage a shift away from car use.

4.3.3. The cycle network in Colchester consists of local routes and longer-distance National Cycle Network (NCN) routes. Provision is concentrated in Colchester city centre. Poor provision outside of the City is reflected in a low cycling modal share. Key issues in both urban and rural areas include severance, safety concerns, and poor interchange facilities. Significant investment to address these challenges and expand the network could help to increase the cycling modal share.

Infrastructure requirements to 2041

4.3.4. The active travel infrastructure requirements to 2041 are set out in the Local Plan mitigation package that was developed along with a review of the strategic forecast modelling outputs. Further details regarding this modelling process are set out in Section 4.2. There are differences in the infrastructure requirements to 2041 depending on whether the ‘High Sustainability’ or ‘Low Sustainability’ pathway, referred to in Section 4.2, is pursued.

4.3.5. Colchester has a significant number of active travel schemes under development. These include the Local Cycling and Walking Infrastructure Plan (LCWIP) and LCWIP refresh proposals. These LCWIP proposals make up the majority of the active mode measures in the mitigation package. The Local Plan mitigation package sets out 12 walking routes and 13 cycling routes which are needed to support growth to 2041. In addition to the LCWIP designated routes, several further active travel routes are put forward in the mitigation package, including footpath widening and the implementation of segregated cycle track on Station Road. As shown in the Project Schedule, in the 'Low Sustainability' scenario, the number of schemes needing to be delivered to support Local Plan growth is lower.

4.3.6. To support the proposed route network, the mitigation package also includes measures such as a new crossing over the A12 and dedicated cycling parking at Marks Tey Station. Mobility hubs have been proposed at 17 locations across Colchester, including Highwoods and Tiptree. Mobility hubs are integrated transport interchange points that facilitate connections between modes such as walking, cycling, public transport and shared mobility. They typically include active travel infrastructure such as cycle parking, but also seating, real-time travel information and electric vehicle charging. The scale and nature of mobility hubs can vary according to local context and the aims of the scheme. All 17 mobility mub locations are included in both the 'High Sustainability' and 'Low Sustainability' scenarios.

4.3.7. Active travel infrastructure is also expected to be prioritised in the masterplanning of proposed future development sites to support modal shift away from private car and support public transport usage. This includes ensuring high-quality internal provision that integrates with a cohesive network of routes, offering connectivity to key trip attractors. Infrastructure should also provide needed links to transport interchange points, particularly to nearby rail stations.

Costs, funding and delivery

4.3.8. Available information on scheme costs, funding secured and delivery is set out in the Project Schedule for the active travel schemes which have been identified in the Local Plan mitigation package. The costs and funding arrangements are summarised below:

- The costs for the development of the walking and cycling measures in the 'High Sustainability' scenario of the Local Plan mitigation package is approximately £257,000,000.
- At an estimated cost of £500,000 per mobility hub, the total estimated cost of the proposed mobility hubs is £8,500,000.
- In total, there are 84 walking, cycling and mobility hub infrastructure schemes needed to mitigate the Local Plan growth in the 'High Sustainability' scenario and the total cost is £265,500,000.
- Funding totalling £10,978,000 has been secured, indicating a funding gap of approximately £254,882,000.
- In the 'Low Sustainability' scenario there are 50 schemes and the total estimated cost is £134,000,000. Funding totalling £10,978,000 has been secured indicating a funding gap of £123,329,000.
- Some measures will likely require developer funding through S106/S278. Potential grants may also be available from the Department for Transport and Active Travel England.

4.3.9. Further details on the funding gap can be found in the Project Schedule.

Summary

4.3.10. The key summary points relating to active travel are as follows:

- There is some existing cycling infrastructure in Colchester city centre, but limited provision in more rural areas. Given this higher level of provision and the fact that it is

a major employment centre, the most significant cycling levels are seen in Colchester urban area.

- Rural provision of active travel infrastructure largely consists of NCN and leisure walking routes.
- Although improving, there is limited provision of cycling infrastructure at transport interchanges.
- There is planned strategic investment in the city's active travel infrastructure put forward in the recently published LCWIP. These LCWIP routes are key to the Local Plan growth mitigation package.
- A network of mobility hubs across Colchester are another key component of the mitigation package.
- The Project Schedule currently records overall estimated cost of £265.6 million for 84 active travel schemes under the High Sustainability Scenario, and a funding gap of £254.8 million.

4.4. Public transport: bus

Baseline

Current provision

4.4.1. As set out in the Stage 1 and 2 IADP Report, Census 2011 indicated that bus usage as a proportion of total commuting was lower in Colchester (5.7%) in comparison to national levels (7.5%). This proportion dropped significantly in Census 2021 (2.9% in Colchester) as COVID-19 had a major impact on bus usage and provision. Bus service provision is more frequent and comprehensive in Colchester city centre compared to more rural areas. Routes are generally arterial, originating or terminating in the city centre. Park and Ride (PandR) services into Colchester city centre have strong levels of existing demand. PandR is a model that is being built upon to expand provision and enable greater modal choice for users.

4.4.2. The current bus provision in Colchester is affected by the various issues outlined below:

- The road network, particularly in rural areas, has evolved from historic networks and travel patterns. Roads in Colchester are often narrow and indirect making bus trips longer, slower, and more expensive for operators.
- Congestion on major inter-urban routes limits the efficient operation of services at peak times.
- Demographic and land use factors make it difficult to run frequent and commercially viable services at all times, especially out of peak hours.
- While mobile apps provide increasingly accurate real-time information (RTI), the lack of accessibility at bus-stops is a barrier to uptake and modal shift. In more rural areas, bus stops can be unappealing environments without RTI, seating, shelter or lighting.
- There are poor frequencies on some routes, especially in rural areas. This is compounded by a perceived lack of reliability.
- The number of operators leads to confusion among users and concerns relating to the viability of using buses interchange and multi-stage journeys. Ticketing cooperation and service information are major barriers in this regard.
- There is a lack of integration between bus and train networks, and to a lesser extent, other modes of travel, such as walking, cycling, and taxis. All main interchanges have cycling and walking access, including cycle racks, and many have significant car parking.
- Colchester bus station would benefit from improvement. It lacks provision of multi-modal interchange and is increasingly attracting anti-social behaviour.

Infrastructure requirements to 2041

4.4.3. The bus infrastructure requirements to 2041 were set out in the Local Plan mitigation package that was developed along with a review of the strategic forecast modelling outputs. Further details regarding this modelling process are set out in Section 4.2. There are differences in the infrastructure requirements to 2041 depending on whether the 'High Sustainability' or 'Low Sustainability' pathway, referred to in Section 4.2, is pursued.

4.4.4. A large scheme currently in development is the Rapid Transit System (RTS) - a public transport corridor with priority over other traffic, operating on a dedicated lane or all together separated from other traffic. The RTS has been a long-term ambition in Colchester, conceptualised to support new large garden communities. When initially conceived, the RTS consisted of four legs between Colchester and Stansted Airport, including links to four proposed garden communities.

4.4.5. The status of the proposed developments has changed over time and the current priority of the RTS is Route 1 (RTS1), connecting TCBGC, a potential eastern PandR site, Essex University, Colchester Station, Colchester Hospital and the existing northern PandR site. It is proposed that services will run every few minutes, and priority measures will provide a 35% journey time saving between the PandR and the city centre and a 20% saving between Essex University and the city centre. The route is planned to use the proposed A133 – A120 link road.

4.4.6. RTS Route (RTS2) is included in the Local Plan mitigation package 'High Sustainability' scenario. It is a proposed extension of the RTS from the City Centre to Marks Tey coordinated with Lexden Road sustainable transport corridor. This is the only bus-based measure which is not included in the 'Low Sustainability' scenario of the mitigation package. Further details about the route or any intermediate stops are not known at this stage.

4.4.7. The North Essex Rapid Transit Study[165] presents a case for taking forward the planning of a rapid transit system across North Essex, as a keystone of integrated and sustainable transport. This remains at a conceptual stage.

4.4.8. 'Park and Choose' sites have been proposed in Colchester to support growth. These are designed to function as a transport hub. Unlike a traditional PandR site, it would offer a broader range of modal options and amenities, including cycle storage, lockers, e-bikes, car parking, and extensive bus connections. One such scheme was envisioned as the endpoint of the RTS at the TCBGC, Its delivery would help mitigate the impact of the TCBGC on the road network by encouraging a shift to public transport and active modes. This was included in the modelling reference case. A similar scheme was included in the mitigation package, referred to as 'Colchester West'; it is located off the A120 in Marks Tey.

4.4.9. The need for bus capacity improvements across Colchester was identified in the Colchester Bus Capacity Study Infrastructure Proposals Report[166]. As part of the mitigation package, the measure 'Bus Station and Interchange' includes medium to long term improvements to Colchester Bus Station.These schemes may involve construction work, roadway modifications, or the reallocation of existing street space to facilitate smoother bus operations, reduce conflicts with other modes of transportation, and enhance overall efficiency. As uncertainties remain regarding the funding arrangements of this measure (see below), its inclusion in the 'High Sustainability' or 'Low Sustainability' package remains to be determined at this stage.

4.4.10. In addition to physical infrastructure improvements, new routes, frequency upgrades and services extensions are included at several locations as part of the transport mitigation package.

[165] Essex County Council (2017). North Essex Rapid Transit Study
[166] Essex County Council. (2024). Colchester Bus Capacity Study: Infrastructure Proposals

Costs, funding and delivery

4.4.11. Information on scheme costs, funding secured, and delivery for the 18 bus-related schemes which have been identified to date are set out in the Project Schedule. Some of the key costs and funding arrangements are set out below:

- The RTS2 extension from the City Centre to Marks Tey has an estimated cost of £37,500,000, expected to be funded entirely from developer contributions.
- ECC is likely to lead on schemes on the local road network, including bus schemes, although service improvements would be made in collaboration with bus operators. Funding sources for bus improvements will likely include developer funding through S106/S278 and, if available, central government funding such as Bus Service Improvement Plan (BSIP) funding.
- No funding has been secured at this stage for the delivery of improvements to Colchester Bus Station or the delivery of a new 'West Colchester' Park and Choose site. The improvements to Colchester bus station are costed at approximately £10,000,000 while a Park and Choose site has an estimated cost of £7,000,000. The latter scheme is expected to be fully funded by developer contributions. The funding arrangements of the Bus Station are to be determined at this stage, but it is expected that a contribution will be included. It may be shared or reallocated from the mobility hubs.

4.4.12. The Project Schedule thus records overall estimated costs of £67.0 million for bus schemes in the 'High Sustainability' scenario, and a funding gap of £67.0 million. This total cost includes the Bus Station costs, notwithstanding the uncertainties referenced above. Further details on the funding gap can be found in the Project Schedule.

Summary

4.4.13. The key summary points are as follows:

- Bus services in Colchester are limited outside peak hours, and supporting infrastructure is often poorly maintained. These challenges are common in small cities surrounded by rural settlements, as is the case in Colchester. Service provision is notably poorer in the more rural areas of the borough.
- Park and Ride has proved successful in Colchester and is being expanded to increase capacity and offer greater modal choice for users.
- The Rapid Transit System (RTS) is a new public transport service that will provide priority services connecting the city centre to the south-east and will support the TCBGC development.
- To support growth to 2041, an extension of the RTS is proposed from the City Centre to Marks Tey.
- Further proposed measures include upgrades to the Bus Station in Colchester and the delivery of a further Park and Choose site on the A120.
- The Project Schedule records 18 schemes and overall estimated costs of £67.0 million for bus schemes in the 'High Sustainability' scenario, and a funding gap of £67.0 million.

4.5. Public transport: rail

Baseline

Current provision

4.5.1. Colchester is located at a strategically important location on the East Anglian rail network, with three lines serving the area. The Sunshine Coast Line and Gainsborough Line are key branch lines that connect to the Great Eastern Main Line (GEML) at Colchester and Marks

Tey, respectively. These lines play a vital role in regional passenger and freight transport, given Colchester's proximity to London, other East Anglian urban centres, and the ports of Harwich and Felixstowe.

4.5.2. The current rail provision in Colchester is affected by the quality and capacity issues outlined below[167],[168]:

- Access to rail stations – access to Colchester's rail stations is generally good but improved active travel infrastructure is needed for better connectivity and multi-modal interchange.
- Quality and accessibility of stations – some stations require modernisation for better accessibility, including step-free access and enhanced facilities. Overcrowding during evening peak hours has been observed at Colchester Station, relating to the arrival of services from London.
- Network safety – there remain a number of level crossings on the network which are potential safety concerns. Replacing level crossings with pedestrian bridges and other safer infrastructure is a priority.
- Service reliability – despite recent upgrades to rolling stock, there remain reliability concerns on the network. Pinch-points elsewhere on the network, especially the GEML, impact on the services in Colchester, for example limited capacity at Stratford and London Liverpool Street Stations are longstanding issues. Prior to the COVID-19 pandemic, the GEML was operating at full capacity in the peak hours between London and Colchester. As patronage has begun to stabilise post-COVID pandemic, potential capacity issues are being reassessed by Network Rail.
- Freight constraints – ensuring a sustainable balance between freight movements on the GEML and the cross-country rail corridor to Felixstowe is key to managing rail freight capacity constraints.

Infrastructure requirements to 2041

4.5.3. Rail based measures were not put forward as part of the Local Plan mitigation package described in Section 4.2. During Stage 1 and 2, it was noted that there are no significant committed or planned rail-based schemes in Colchester. However, there is an increasing emphasis on improving access to rail stations through multi-modal interchange including enhanced bus services and active travel provision, as outlined in the preceding sections. Some multi-modal mitigation measures at rail stations were included in the mitigation package and Project Schedule.

4.5.4. The development of mobility hubs has been proposed for Colchester North Station and Hythe Station, with cycle parking improvements propsoed for Marks Tey and Chappel & Wakes Colne. Further details about mobility hubs and cycling infrastructure are detailed in Section 4.3.

4.5.5. In terms of future demand, analysis in the Network Rail Great Eastern Main Line Study[169] stated that in the period between 2018 and 2033, passenger growth at Colchester Station is expected to be 3.2% with an additional 1.8% growth on the entire GEML between 2033 and 2042, although it is noted that there was greater uncertainty surrounding this figure. Given changes to the travel patterns, trip rates, and growth proposals as a result of the pandemic and the prevalence of hybrid working, there is now less certainty in these figures.

[167] Essex Highways. (2022). Colchester Future Transport Strategy. https://www.essexhighways.org//uploads/downloads/colchester%20future%20transport%20strategy%20-%20march%2022.pdf
[168] Network Rail. (2016). Anglia Route Study. https://www.networkrail.co.uk/wp-content/uploads/2016/11/Anglia-Route-Study-UPDATED-1.pdf
[169] Network Rail, (2019); Great Eastern Main Line Study. Available at: https://www.networkrail.co.uk/wp-content/uploads/2019/08/Network-Rail-Great-Eastern-Main-Line-Study-2019.pdf.

Costs, funding and delivery

4.5.6. No rail projects have been identified within Colchester in the Project Schedule.

4.5.7. Any future major projects which emerge would likely be funded by Network Rail and central government. If development sites are located near to rail lines, then developer funding would likely be required to support minor accessibility upgrades. Issues of stock and similar supporting infrastructure are managed by the Train Operating Company (TOC).

Summary

The key summary points relating to rail are as follows:

- Colchester is a strategically important location in the East Anglian rail network. Colchester Station is located on the Great Eastern Main Line, with frequent services to London and other key regional destinations.
- Significant rail freight flows through and nearby to Colchester. Freight is central to rail policy and planning in the region.
- No significant rail schemes have been included in the 2041 Local Plan growth mitigation package and therefore the Project Schedule. However, there is an increasing emphasis on improving access to rail stations through multi-modal interchange including enhanced bus services and active travel provision

4.6. Roads

Baseline

Current provision

4.6.1. The road network in Colchester is made up of the Strategic Road Network (SRN), managed by National Highways, and the Local Road Network (LRN), managed by ECC. Colchester is a strategically important location in the SRN. The SRN in Colchester consists of two key routes, the A12 and A120, which serve regional and national connectivity, linking London, Chelmsford, Ipswich, and Harwich Port. Significant links on the LRN include the A133, A134, and A1232.

4.6.2. The SRN in Colchester faces a number of challenges: the A12 experiences significant congestion at multiple junctions (J25-J29) which causes delays; similarly, the A120, particularly the single carriageway between Braintree and Marks Tey, suffers from severe congestion as well as safety issues and poor reliability.

4.6.3. Within Colchester, arterial routes into the city centre are characterised by frequent delays during peak periods, affecting roads such as Ipswich Road, Cowdray Avenue, and St Andrew's Avenue. These delays exacerbate safety and air quality concerns. In rural areas, while congestion is less pronounced, safety remains a critical issue.

Infrastructure requirements to 2041

4.6.4. The road infrastructure requirements to 2041 were set out in the Local Plan mitigation package that was developed along with a review of the strategic forecast modelling outputs. Further details regarding this modelling process are set out in Section 4.2. There are significant differences in the road infrastructure requirements to 2041 depending on whether the 'High Sustainability' or 'Low Sustainability' pathway, referred to in Section 4.2, is pursued.

4.6.5. Prior to the completion of the strategic modelling work, National Highways responded to the request for further engagement as part of Stage 3, providing valuable commentary on the implications of the spatial distribution of growth for the SRN and its response to future planning applications. National Highways and CCC discussed the strategic modelling work as it progressed; these discussons are ongoing.

4.6.6. As noted above, the A12 is running close to capacity over most of its length in the local authority area. There are specific pinch points where congestion worsens, mainly at junctions. A12 J26 is a particularly problematic junction, which is very close to capacity and has very little room for improvement and is already under signal control. Minor alterations to the approaches to the junction have been agreed with National Highways in the past 12 months. Proposals consist of signing and lining updates in order to try to minimise weaving close to the junction and help traffic flow through the junction. While located at A12 J26, the proposals are all located on the ECC local road network. National Highways have indicated that further physical measures at this location are unlikely to be able to provide significant capacity improvements as there are space constraints and further opportunities to increase capacity are limited. Solutions to mitigate congestion at this junction should focus instead on modal shift away from private car.

4.6.7. In the west of the local authority area, the proposed scheme to upgrade the A12 between J19 and 25 including the junctions was cancelled by the Government in 2025. This scheme was designed to deal with existing issues and growth proposed in the adopted Local Plan. Improvements at this location are part of the reference case for the modelling of Local Plan growth. Sensitivity testing that was completed as part of the modelling work indicated that A12 Junction 19 to Junction 25 widening would be desirable to address issues in the reference case which would be compounded by the addition of Local Plan growth.

4.6.8. In October 2025, CCC commissioned a further update to the Local Plan Review Transport Evidence to examine the mitigation requirements for the A12 Junction 25, in the absence of the A12 J19 to 25 upgrade mentioned above. The J25 A12 modelling will focus on the highway mitigation required in terms of physical network changes and signalling, as well as reflecting the sustainable measures already identified as required to provide a complete mitigation package for the Marks Tey location (e.g. relating to active travel, mobility hubs and the RTS). A high level cost estimate will be provided for the additional mitigation measures required, which will be reflected in the next iteration of the IADP as appropriate.

4.6.9. The A120 between Braintree and the A12 is running at and above capacity during most of the day and has a poor safety record. National Highways have stated that it cannot accommodate further growth without significant improvement. A new link from Galleys Corner (Braintree) to a new junction with the A12 south of Kelvedon has previously been proposed. Any such intervention would be costly. A scheme has not been committed and there remains significant uncertainty in the delivery of a scheme. The strategic modelling confirmed that such a scheme would be disproportionate to the impact of Local Plan growth.

4.6.10. The junction of the A120 westbound slip road with the A12 and the circulatory road at Junction 29 is operating at or near full capacity. Adjustments to the traffic signal timings will be required to rebalance green time and reduce queue lengths on the slip roads, preventing queues from extending to the full length of the slip. As part of the Local Plan growth mitigation package, full signalisation and widening of the off-slip was proposed. At A12 Junction 27 (Spring Lane roundabout), signalisation of all arms is proposed.

4.6.11. On the LRN, the A120 - A133 Link Road scheme will provide a link between the A120 and the A133, reducing the need to travel directly into Colchester city centre, helping to manage congestion on local roads, making it easier to access the SRN, and supporting the delivery of the TCBGC. Phase one of the project will see a new roundabout created on the A133 east of the University of Essex, 1.8km of dual carriageway road and three junctions, between the A133 and a new ‘Allen’s Farm Roundabout’. Phase 2 of the project will connect up with the A120.

4.6.12. Further signalisation measures are proposed in the Local Plan growth mitigation package at locations across Colchester in both the ‘High Sustainability’ and ‘Low Sustainability’ scenarios. Some specific junctions are highlighted in the mitigation package and Project Schedule, but there is also a proposed area-wide investment in dynamic movement management.

SRN Issues and Growth

4.6.13. The information in this section is taken directly from National Highways' consultation response. Further consultation with National Highways will be undertaken as part of Stage 4 of the IADP process.

4.6.14. It is important to understand how growth impacts on the SRN. Impacts need to be considered early in the planning / assessment process and appropriate developer-funded interventions identified to mitigate adverse effects arising from growth. These measures or interventions can include a range of forms: infrastructure upgrades, capacity enhancements, or demand management strategies, helping to maintain the functionality and safety of the SRN.

4.6.15. National Highways have stated that they will consider future planning application proposals on a case-by-case basis and if, as a result of traffic generated by the development there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the SRN would be severe, National Highways will either recommend that permission should be refused or recommend appropriate Planning Conditions to make the development acceptable.

4.6.16. National Highways are supportive in principle of a Monitor and Manage (MandM) approach that reflects the principles of current policies. Government guidance is clear that 'MandM' and 'Vision and Validate' (VandV) approaches require a robust demonstration of how proactive, not reactive, measures will be delivered in practice. Such an approach may be acceptable on the basis that if the scale of the local plan is modest, traffic impacts will build up over time and are unlikely to be unacceptable within a reasonable timeframe necessary to identify a new package of transport interventions to satisfactorily mitigate the impacts of the local plan on the SRN. National Highways would be supportive of such an approach, in lieu of an updated transport evidence base, provided that there is clear commitment to the process from the Council, including the early rebasing of the evidence base. This should set out to identify a new package of improvements which are demonstrated to be necessary to ensure that unacceptable road safety impacts or severe congestion impacts, do not arise. Such a package should only be set out after taking into account measures to reduce the need to travel particularly in peak periods and to provide mode choice.

4.6.17. The MandM strategy should be proactive. It should forecast likely problems over a subsequent MandM period (safety and congestion) and prioritise interventions such that those problems do not or are unlikely to arise. The MandM strategy should be supported by Development Management policy such that planning permission for development will only be granted where the impact of that development is not considered to be unacceptable; there can be no assumption that necessary measures will be in place when needed. Alternatively or additionally, the Development Management policy should set out that Grampian Conditions[170] could be attached where such conditions satisfy the relevant tests, which would prevent or restrict development until such time as necessary mitigation was in place. Where Grampian conditions relate to interventions that are to be delivered through a developer contributions Supplementary Planning Document (SPD), it will be necessary to have provision for forward funding of such schemes such that development is not prevented or restricted through the inability of the relevant delivery partner to deliver due to insufficient funding being accumulated. The outline of the MandM approach should be recorded in a Statement of Common Ground or Memorandum of Understanding and the MandM strategy should be developed for submission ahead of the examination. National Highways acknowledge that change is complex, expensive, and time-consuming and will continue to work collaboratively with CCC as it produces the necessary detail and evidence base to monitor and manage the impacts of development traffic.

[170] Grampian conditions are planning conditions used to control the timing of certain development activities. They are typically used to ensure that essential infrastructure, such as roads, is in place before a development can proceed.

Costs, funding and delivery

4.6.18. Information on the costs, funding and delivery of the 27 highways schemes set out in the Project Schedule are summarised below:

- The highest costs are associated with the large National Highways led projects in the modelling reference case. It is expected that if these schemes are delivered it will be through Road Investment Strategy (RIS) funding. RIS3 is delayed to 01/04/26. In March 2025 the government gave National Highways a 1-year £4.8bn settlement for the interim period. Until RIS3 is ready, it is unlikely any schemes will be confirmed by National Highways.
- The A12 Junction 29 widening scheme has an estimated cost of £10,000,000, with an additional £250,000 for the associated signalisation work. The total estimated cost of signalisation improvements and traffic management across Colchester is £12,000,000.
- All together, the Project Schedule currently identifies estimated costs of £180.5m for highway schemes under both scenarios, and a funding gap of £52.2m. Note that this total cost includes some reference case schemes, but excludes A12 widening and a large-scale measure on the A120. For further details see the Project Schedule.
- For SRN schemes, National Highways is the highway authority so will lead on the assessment, design, funding and delivery of such schemes, working with partners. ECC will do the same for LRN, with a range of potential funding sources including developer funding.

Summary

4.6.19. The key summary points for roads are as follows:

- Colchester is a strategically important location in the SRN. The A12 and A120 transect the local authority area.
- The SRN has significant issues on both the A12 and the A120, driven by existing demand. Issues on the A120 are severe and unsustainable. Capacity issues at junctions are interconnected and require holistic solutions. The most significant issues on the SRN are not driven by Local Plan growth.
- There are significant delays on multiple local roads in the city centre and safety concerns at junctions across Colchester.
- The proposed measures in the Local Plan growth mitigation package are proportional to the impact of that growth. The largest individual measure by cost is widening of the A12 Junction 29 slip.
- All together, the Project Schedule identifies 27 highways schemes with estimated costs of £180.5m and a funding gap of £52.1m.
- National Highways will assess planning proposals on a case-by-case basis. They support the principle of a Monitor and Manage approach to development, emphasising the need to monitor the impacts of growth and implement appropriate mitigation within a suitable timeframe to address issues effectively.

4.7. Electric vehicle (EV) infrastructure

Baseline

Current provision

4.7.1. Essex has over 300 public EV charge points, including 50 ultra-rapid and 50 rapid chargers, with most located in urban areas such as Colchester[171]. Provision remains below the UK average, with 39 charge points per 100,000 people compared to 60 across the UK. Limited

[171] Essex Highways. (2023.). *Essex electric vehicle charge point strategy*. Essex County Council. https://www.essexhighways.org//uploads/downloads/safer-greener-healthier/essex-electric-vehicle-charge-point-strategy.pdf

off-street parking in high-density areas exacerbates accessibility challenges, particularly in urban and suburban locations.

4.7.2. Current EV infrastructure in Essex does not meet existing demand, falling short in both quantity and access. Significant investment and expansion are needed to address these gaps and support the growing transition to electric vehicles, aligning with the UK government target of delivering 300,000 charge points by 2030[172].

Infrastructure requirements to 2041

4.7.3. In terms of the infrastructure requirements for the growth proposed to 2041, there is still considerable uncertainty around potential future technology and policy affecting the rate of transition to EVs. The Government anticipates up to 10 million zero-emission battery electric vehicles (BEVs) will be needed on the road by 2030 to help meet net zero targets.

4.7.4. Based on the Government's projections, ECC notes that BEV uptake in Essex could potentially increase to 50,000 by 2025, 220,000 by 2030, and 800,000 by 2040, representing around 88% of eventual car and van ownership. These estimates align with wider forecasting work by Transport East for the region and reflect their 2040 'High EV' uptake scenario.

4.7.5. The Government plans to phase out plug-in hybrid electric vehicles (PHEVs) by 2035, with ownership in Essex expected to peak at around 135,000 before the ban on new sales. Afterward, PHEV ownership is expected to decline rapidly in favour of BEVs.

4.7.6. Regarding the need for supporting infrastructure, particularly charge points, it is noted in the Essex Electric Vehicle Charge Point Strategy that uncertainty around future EV uptake rates should not hinder efforts to deliver more charge points. These charge points should offer flexible charging solutions in various locations to meet different user needs. The Government expects most people with access to private off-street parking to install their own infrastructure and charge at home.

4.7.7. The Government also identifies a minimum need for around 300,000 publicly accessible charge points to meet the anticipated demand of 10 million BEVs by 2030. The majority would serve residential on-street users and, to a lesser degree, on-route and public destinations such as shops, leisure facilities, and transport hubs. Industry estimates vary, but as a guideline, this equates to approximately one publicly accessible charge point for every 35 BEVs on the road.

4.7.8. In terms of future supply, the following points are all longer-term aspirations for EV infrastructure in the county. The detail and extent of roll out required has not been put forward at this stage but is expected in further iterations of the Electric Vehicle Charge Point Strategy.

- On-street charge points for residential users where car travel is necessary.
- Use public property, such as libraries, country parks, community halls, parks, schools, or council operated car parks for public charge points (liaison required with public sector partners).
- Promote 'peer-to-peer' charging platforms, and any regulatory obligations, to residents (where those with EV chargers can make them available for others to use).
- Expand shared mobility schemes, like EV car clubs, as an alternative to private car ownership.
- Install charge points at park and ride sites or railway stations for commuters looking to make use of public transport for at least some of their journey.

4.7.9. The Project Schedule has no specific entries relating to EV infrastructure. However, delivery of EV chargepoints is incorporated with plans for mobility hubs. Mobility hubs are integrated transport interchange points that facilitate connections between modes such as walking,

[172] https://www.gov.uk/government/news/tenfold-expansion-in-chargepoints-by-2030-as-government-drives-ev-revolution

cycling, public transport and shared mobility, and which would include EV infrastructure. There is also an expectation for on-site EV charging infrastructure. This is expected to be delivered by the developer and not through the Local Authority.

Costs, funding and delivery

4.7.10. Information on scheme costs, funding secured and delivery for mobility hubs at 17 locations across Colchester are set out in the Project Schedule. Details and costs are set out within section 4.3 on Active Travel above.

4.7.11. In terms of delivering EV infrastructure, the Electric Vehicle Charge Point Strategy emphasises the importance of ongoing dialogue with local authority partners, Transport East, local transport providers, energy suppliers, National Highways, and the DfT. This collaboration needs to understand and coordinate cross-boundary opportunities and maximise available funding. Establishing an EV infrastructure user group has been proposed by Essex Highways to share data, monitor progress, explore opportunities, and assist local authorities in developing their infrastructure plans.

4.7.12. Furthermore, the Electric Vehicle Charge Point Strategy highlights the importance of engagement with charge point operators and providers. ECC will continue these collaborations to explore investment opportunities from local and central government funding, including schemes like the On-Street Residential Chargepoint Scheme (ORCS) and Local Electric Vehicle Infrastructure (LEVI) grants, as well as commercial sources. Developer funding is expected from S106 and/or S278.

4.7.13. Finally, ECC intends to engage with industry partners to develop design and best practice guidance for installing infrastructure on public property. This engagement aims to establish clear expectations for infrastructure deployment across the county.

Summary

4.7.14. Key summary points relating to EVs are as follows:

- The EV charging infrastructure in Colchester is currently expanding from a low baseline. Provision of public charging devices in the East of England is significantly lower than the national number per head of population.
- Future demand is likely to increase very significantly as the government has implemented ambitious targets on the roll out of EV infrastructure and phasing out of petrol and diesel cars.
- The expansion of EV infrastructure is heavily dependent on both government and private sector funding, including developers (S106 and/or S278).
- The delivery of new charge points and ensuring these charge points are at strategically located multi-modal interchanges is a key priority for investment.
- The delivery of EV charge points is incorporated with plans for mobility hubs. Information on scheme costs, funding secured and delivery for mobility hubs at 17 locations across Colchester are set out in the Project Schedule.

5. Infrastructure assessment: utilities, waste and water

5.1. Electricity

Baseline

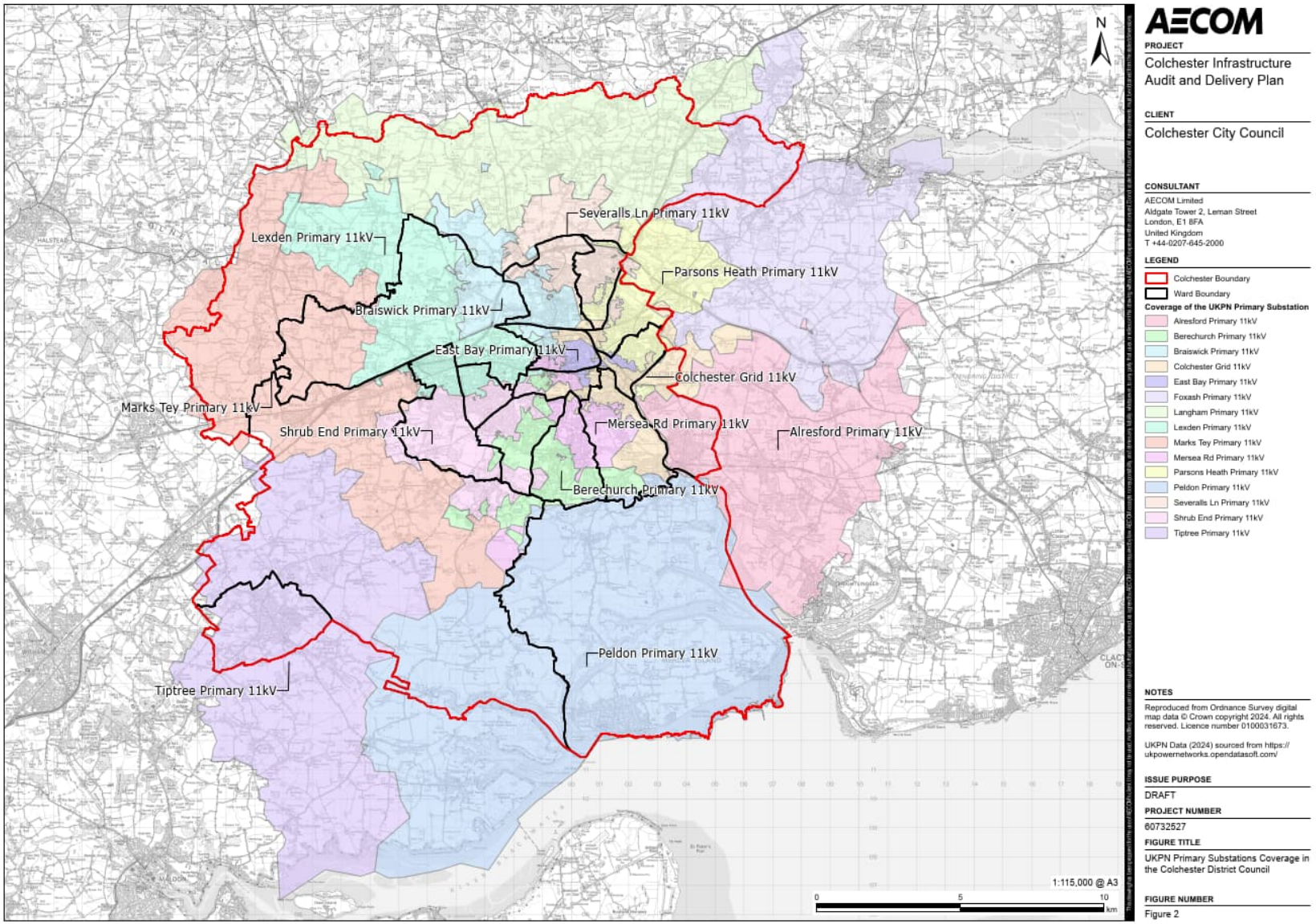
Current provision

5.1.1. Colchester is currently served by fifteen primary substations that are operated by UK Power Networks (UKPN). The capacity of each primary substation is presented in Table 5-1. Only Tiptree Primary 11kV substation has less than 5% space demand headroom.

Table 5-1 Primary Substation Capacity and Demand Headroom Availability

Primary Substation	Current Max Demand (MW)	Demand Headroom Availability	Max Capacity (MW)	Spare Capacity (MW)	Demand Headroom Availability
Braiswick Primary 11kV	21.9	57.5%	51.5	29.6	Green (Over 5% headroom)
Colchester Grid 11kV	37.4	55.6%	84.2	46.8	Green (Over 5% headroom)
East Bay Primary 11kV	19.0	51.6%	39.3	20.3	Green (Over 5% headroom)
Lexden Primary 11kV	23.0	41.7%	39.5	16.5	Green (Over 5% headroom)
Shrub End Primary 11kV	22.1	59.0%	53.9	31.8	Green (Over 5% headroom)
Mersea Rd Primary 11kV	22.0	51.2%	45.1	23.1	Green (Over 5% headroom)
Parsons Heath Primary 11kV	22.1	38.6%	36.0	13.9	Green (Over 5% headroom)
Alresford Primary 11kV	14.4	11.1%	16.2	1.8	Green (Over 5% headroom)
Berechurch Primary 11kV	19.3	61.7%	50.4	31.1	Green (Over 5% headroom)
Severalls Ln Primary 11kV	23.1	44.5%	41.6	18.5	Green (Over 5% headroom)
Marks Tey Primary 11kV	14.4	41.7	24.7	10.3	Green (Over 5% headroom)
Tiptree Primary 11kV	12.5	4.2	13.0	0.5	Yellow (Between 5% overloaded and 5% headroom)
Langham Primary 11kV	14.4	52.7	30.4	16.0	Green (Over 5% headroom)
Foxash Primary 11kV	11.5	19.8	14.3	2.8	Green (Over 5% headroom)
Peldon Primary 11kV	15	36.7	23.7	8.7	Green (Over 5% headroom)

Figure 5-1 UKPN Primary Substation Coverage Areas



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LEGEND
- Colchester Boundary
- Ward Boundary

Coverage of the UKPN Primary Substation
- Alresford Primary 11kV
- Berechurch Primary 11kV
- Braiswick Primary 11kV
- Colchester Grid 11kV
- East Bay Primary 11kV
- Foxash Primary 11kV
- Langham Primary 11kV
- Lexden Primary 11kV
- Marks Tey Primary 11kV
- Mersea Rd Primary 11kV
- Parsons Heath Primary 11kV
- Peldon Primary 11kV
- Severalls Ln Primary 11kV
- Shrub End Primary 11kV
- Tiptree Primary 11kV

NOTES

UKPN Data (2024) sourced from https://ukpowernetworks.opendatasoft.com/

ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60732527

FIGURE TITLE
UKPN Primary Substations Coverage in the Colchester District Council

FIGURE NUMBER
Figure 2

Infrastructure requirements to 2041

5.1.2. Based on the emerging development trajectory provided by CCC, the increase in electricity usage by 2041 has been estimated. The housing projections include potential emerging allocations associated with the new Local Plan (approximately 12,000 homes), existing allocations within the Adopted Local Plan (approximately 2,300 homes) and existing commitments which already have planning permission (approximately 6,200 new homes). The anticipated electricity usage for a single housing unit has been assumed to be 7.5kW/day based on the annual consumption value stated in the BSRIA (BG 86/2024) Electrical Criteria173,. This value is based on electrically heated homes.

5.1.3. The Future Homes Standard 2025 is a major regulatory shift in UK housebuilding that aims to reduce carbon emissions from new homes by 75-80% and ensure homes are "zero-carbon ready" to support the UK's Net Zero by 2050 goal. The standard was initially announced in 2019 and following a series public consultations, the final regulations are expected to be published in autumn 2025 with legal enforcement from December 2026 and full compliance by December 2027. An initial key requirement of this standard was the removal of carbon based heating systems in new homes which would ban the installation of gas boilers in new residential homes. However, the proposed ban on gas boilers has been postponed as the government is still consulting on whether it is feasible or appropriate to implement the ban. New homes will still be required to use low-carbon heating system although gas connection for new homes may still be allowed depending on the outcome of ongoing government public consultation. Given the uncertainty of the implement of new gas connections for new residential homes, it has for this assessment that new housing delivered within the emerging development trajectory will be electrically heated.

5.1.4. The electrical demand for new employment developments has been based on the projections of:

- Draft preferred options allocations
- Committed employment sites safeguarded by the Local Plan
- Employment areas within the Tendring Colchester Borders Garden Community (TCBGC)

5.1.5. Each allocated area under the Local Plan Policy has been broken down into the estimate square meterage for office and industrial space that it will provide. These areas were then used to calculate electrical demand.

5.1.6. Using BSRIA Electrical Criteria (BG 86/2024), the following typical electrical loads were applied:

- Office space: 0.092 kW/m^2
- Industrial space: 0.111 kW/m^2

5.1.7. It is important to note that industrial electrical demand can vary widely from 0.017 kW/m^2 for warehouse to 0.223 kW/m^2 for laboratories, and up to 1.5 kW/m^2 for data centres. Since BSRIA Electrical Criteria (BG 86/2024) does not provide a single overarching value for industrial use, a conservative of estimate 0.111 kW/m^2 (based on high-end office space) was used to reflect the potential diversity in industrial demand.

5.1.8. Each residential and employment development area has been assigned the Primary Substation catchment in which it is located. The total estimated increase in electrical demand for each substation is the sum of demands from all developments within its catchment. Whilst this gives an indication of whether a substation can support the proposed development, it should be noted that UKPN may choose to supply electricity from a different substation with greater available capacity.

[173] Building Services Research and Information Association (BSRIA) Electrical Criteria by Chin Hang "Kay" Lam (BG 86/2024) February 2024

5.1.9. The estimated electricity demand for 2041 required for future growth is shown in Table 5-2. The 2041 demand value includes current demand plus the additional demand from the proposed housing and employment sites.

Table 5-2 Estimated 2041 Peak Electricity Demand

Primary Substation	Total Capacity (MW)	Current Demand (MW)	Estimate increase for emerging development trajectory (MW)	Estimate 2041 Peak Demand (MW)
Braiswick Primary 11kV	51.5	21.9	17.2	39.1
Colchester Grid 11kV	84.2	37.4	14.2	51.6
East Bay Primary 11kV	39.2	19.0	5.3	24.3
Lexden Primary 11kV	39.5	23.0	12.7	35.7
Shrub End Primary 11kV	53.9	22.1	1.8	23.9
Mersea Rd Primary 11kV	45.1	22.0	3.1	25.1
Parsons Heath Primary 11kV	36.0	22.1	19.9	42.0
Alresford Primary 11kV	16.2	14.4	3.4	17.8
Berechurch Primary 11kV	50.4	19.3	7.5	26.8
Severalls Ln Primary 11kV	41.6	23.1	10.7	33.8
Marks Tey Primary 11kV	24.7	14.4	46.3	60.7
Tiptree Primary 11kV	13.1	12.5	14.5	27.0
Langham Primary 11kV	30.4	14.4	9.1	23.5
Foxash Primary 11kV	14.3	11.5	0.1	11.6
Peldon Primary 11kV	23.7	15.0	4.8	19.8
TOTAL	563.9	292.1	170.6	462.7

5.1.10. It is important to note that the results presented in Table 5-2 are high level estimates based on publicly available data. The total capacity for each primary substation has been interpolated based on the current peak demand and demand headroom availability percentage presented in Table 5-1. Furthermore, as stated in the Stage 1 and 2 report, demand headroom availability is not a definitive guide to whether a primary substation has capacity to support further expansion. A primary substation's ability to support further development is also dependent on the condition of its equipment and the available capacity at the upstream transmission level i.e. the Global Supply Points (GSP).

5.1.11. Noting the caveats regarding the accuracy of the data presented in Table 5-2, the high level estimates show that 11 of the 15 primary substations have capacity to accommodate the estimated demand increase resultant from the emerging housing and employment trajectory. Four primary substations are estimated to have insufficient capacity to accommodate the anticipated demand increase in their coverage area.

5.1.12. The four primary substations forecasted to have insufficient capacity to accommodate the predicted demand are all located on the eastern and western extents of the local authority

boundary with the exception of Parsons Heath which is located to east of the City Centre. This indicates there is less capacity in rural areas of Colchester which would be expected. District Network Operators (DNO) reinforce their electrical infrastructure in response to demand in accordance with their licencing condtions. Since rural areas have lower electrical demands, the capacity of the network in these areas is smaller as they require a lower supply.

5.1.13. Marks Tey and Parsons Heath are forecasted to have the greatest increase in electrical demand by 2041, whilst Tiptree is anticipated to the fourth highest demand increase. This increase would put all three primary substations into a demand deficit. Alresford Primary substation is predicted to go into a capacity deficit, but does not experience a significant increase in demand, which highlights the limited capacity in this area.

5.1.14. The Colchester Grid primary substation is forecasted to have the fifth highest demand increase by 2041. Despite this increase, the primary substation will still have over 40% spare capacity (based on demand vs capacity).

5.1.15. It is important to note that the forecasts presented in Table 5-2 present a more optimistic scenario than the forecast modelling that was performed by UKPN and was presented in the Stage 1 and 2 report. The forecasts presented in this report reflect only the increase in electrical demand from residential homes and select employment Colchester identified in the development trajectory. The modelling undertaken by UKPN was detailed and accounted for a number of factors including core demand, low-carbon transport, battery storage, decarbonised heating, distribution generation and network flexibility.

Costs, funding and delivery

5.1.16. No planned UKPN projects have been identified to increase capacity of the electrical infrastructure in Colchester.

5.1.17. To estimate the cost of meeting electricity demand associated with growth to 2041, a high-level benchmarking activity has been conducted[174]. Allowances have been made for both primary and secondary costs for all increased loads on substations within the local authority area. **Table 5-3** below sets out the estimate electricity costs to 2041.

5.1.18. The following costs have been applied for primary substations: below 10MW is circa £1.2 million, 10-15 MW is circa £10.0 million, 15-30MW is circa £25.0 million, and above 30MW is crica £35.0 million. In addition, any increase over 15MW will require a new Primary substation which will triggered a Modification Application (Mod App), an application to National Grid to make alternations to the network to accommodate the additional capacity on the DNO network. The benchmark cost for a Mod App is approximately £15.0 million.

5.1.19. Secondary costs are for the 11kV network and distribution. An allowance of £250,000 per 1MW has been allowed which would be for distributing to the site and around it. Furthermore, an allowance as a percentage has also been included for professional fees and risk / contingency.

5.1.20. It should be noted that estimated costs set out in this IADP could increase due to proportionate factors such as load against capacity installed at a grid supply point.

Table 5-3 Estimated electricity costs to 2041

Primary Substation	Estimate increase for emerging development trajectory (MW)	Primary and Secondary Costs (£)	Professional Fees and Surveys 3% (£)	Risk / Contingency 10% (£)	Total (£)
Braiswick Primary 11kV	17.2	44,300,000	1,329,000	4,562,900	50,191,900
Colchester Grid 11kV	14.2	13,550,000	406,500	1,395,650	15,352,150

[174] AECOM, Cost Consultants July 2025.

Primary Substation	Estimate increase for emerging development trajectory (MW)	Primary and Secondary Costs (£)	Professional Fees and Surveys 3% (£)	Risk / Contingency 10% (£)	Total (£)
East Bay Primary 11kV	5.3	2,525,000	75,750	260,075	2,860,825
Lexden Primary 11kV	12.7	13,175,000	395,250	1,357,025	14,927,275
Shrub End Primary 11kV	1.8	1,650,000	49,500	169,950	1,869,450
Mersea Rd Primary 11kV	3.1	1,975,000	59,250	203,425	2,237,675
Parsons Heath Primary 11kV	19.9	44,975,000	1,349,250	4,632,425	50,956,675
Alresford Primary 11kV	3.4	2,050,000	61,500	211,150	2,322,650
Berechurch Primary 11kV	7.5	3,075,000	92,250	316,725	3,483,975
Severalls Ln Primary 11kV	10.7	12,675,000	380,250	1,305,525	14,360,775
Marks Tey Primary 11kV	46.3	61,575,000	1,847,250	6,342,225	69,764,475
Tiptree Primary 11kV	14.5	13,625,000	408,750	1,403,375	15,437,125
Langham Primary 11kV	9.1	3,475,000	104,250	357,925	3,937,175
Foxash Primary 11kV	0.1	1,225,000	36,750	126,175	1,387,925
Peldon Primary 11kV	4.8	2,400,000	72,000	247,200	2,719,200
TOTAL	**170.6**	**222,250,000**	**6,667,500**	**22,891,750**	**251,809,250**

Source: AECOM, (2025); Cost Consultants July 2025.

5.1.21. The indicative cost for providing the estimated increased in electricity arising from the emerging development trajectory to 2041 is £251,809,250.

5.1.22. The development of electrical infrastructure is funded and implemented by the DNOs under their licence conditions, typically using funds provided by developers in paying connection fees (whereby the developer pays for provision of the required electricity connection). For this reason, it has been assumed in the Project Schedule that these costs will be met by developers and there is no funding gap.

5.1.23. However, as set out in the Stage 1 and 2 report, the DNOs are severely constrained in providing any investment ahead of need, and as such it will be important to ensure that the provision of electrical infrastructure does not become a constraint on the development of an area. Mechanisms are available to overcome this constraint, but they will require forward planning and liaison between the local authority and the DNO.

Summary

5.1.24. The assessment of Colchester's electricity infrastructure can be summarised as follows:

- UK Power Networks (UKPN) operate fifteen primary substations in the Colchester Borough. Currently, all but one primary substation have more than 5% demand headroom availability.
- The forecasted electricity demand for 2041, based on the emerging housing and employment projections, indicate that all but four primary substations will have capacity to accommodate the anticipated increase in electricity demand. However, this assessment is less conservative (i.e. more optimistic) than the Long Term Scenario Forecasts that were performed by UKPN and presented in the Stage 1 and 2 report.
- The primary substation areas predicted to have insufficient capacity to accommodate the anticipated increase in electricity demand are located at the eastern and western extents of Colchester, in rural areas.

- No planned UKPN projects have been identified to increase capacity of the electrical infrastructure in Colchester.
- In accordance with DNO licence conditions, UKPN do not proactively invest in their network ahead of need. Instead, they reinforce their networks as required to suit committed developments, typically using funds provided by developers in paying connection fees.
- A high-level benchmarking exercise indicates that the cost of delivering electricity demands associated with the potential emerging allocations would be approximately £251.8 million. It is assumed that these costs will be met by the utility company and developers through connection charges, as noted above.

5.2. Gas

Baseline

Current provision

5.2.1. Cadent Gas operate high pressure gas main through Colchester. For national security reasons, Cadent Gas have not granted permission to disclose the locations of these mains within this report. However, during a call with Cadent Gas on the 19th July 2024, Cadent stated that there are no potential bottlenecks to future development in their network within Colchester.

Infrastructure requirements to 2041

5.2.2. As stated in Section 5.1.2, the implementation of the Future Homes Standard 2025 – a major regulatory shift in UK Housebuilding that aims to reduce carbon emissions from new homes – creates uncertainty about the future of gas connections to new residentials homes. When the Future Homes Standard 2025 was originally announced, it was the intention to ban the installation of gas boilers in new homes by 2025. However, the government has since postponed the ban following public consultation with a final decision still to be made. The Future Homes Standards regulations are expected to be published in Autumn 2025 and whilst gas boilers will not be banned as of yet, the regulations do require new homes to use low-carbon heatings systems. Given the governments Net Zero targets, the forecasted drop in demand for gas and the requirements for low-carbon heating systems to be installed in new homes, it has been assumed that new residential homes will not create a demand. The demand for gas from commercial development however appears less uncertain as it not covered under the Future Homes Standard and will likely still require a gas connection. As such, the demand increase for gas by 2041 has been estimated based solely on the employment sites information provided by CCC. BSRI Rules of Thumb 5th Edition[175], does not specify daily gas consumption for industrial land-use. Given the uncertainty about the future gas requirement for commercial development, it was decided to base all gas consumption on office use which is 120 kW/m^2 per annum. The daily consumption for employment areas is therefore assumed to be 0.5 kW/m^2/year (120 kW/m^2 divided by 245 days). The size of the employment area in sqm has been estimated based on size of the site and application of plot ratios.The estimated demand increase is presented in Table 5-4.

Table 5-4 Estimated Increase in Demand for Gas associated with Existing Employment Allocations

Draft Preferred Options Allocations	Employment Area (m^2)*	Settlement	Local Plan Policy	Gas demand increase by 2041 (MWhr/day)
Colchester Business Park (Severalls SEA)	20,400	Tiptree	PEP1	10.0
Land at Patterns Yard	14,700	Colchester	PEP11	7.2

[175] Building Services Research and Information Association (BSRIA) Rules of Thumb Guidelines for building services (5th Edition) by Glenn Hawkins (BG 9/2011) March 2011

Wakes Hall Business Centre	7,650	West Bergholt	PEP12	3.7
Knowledge Gateway (University Research Park)	38,250	Wakes Colne	PEP2	18.7
Maldon Road	4,400	Colchester	PEP4	2.2
Land South of A12 and north of proposed new route of A12, Marks Tey	112,000	Colchester	PEP5	54.9
Highland Nursery	9,350	Marks Tey	PEP7	4.6
Land south of Factory Hill	32,900	Tiptree	PEP8	16.1
Bullbanks Farm	5,600	Tiptree	PEP9	2.7
Site with Planning Permission Safeguard for employment use in Preferred Options Local Plan				
Northern Gateway	19,550	Colchester	OA4	9.6
Lodge Park (app 192151)	3,000	Langham	PEP10	1.5
Land north and south of Tollgate West, Stanway (app 211610)	25,900	Colchester	PEP3	12.7
Andersons Site	28,000	Mark Tey	PEP6	13.7
Tendring Colchester Borders Garden Community (TCBGC)				
TCBGC	24,500	Colchester	ST9	12
TOTAL	346,200			169.6

5.2.3. The values presented in Table 5-4 assume all commercial development in Colchester delivered up to 2041 will be heated by gas. This could be considered as a conservative assumption as gas connections to commercial properties may be banned before 2041. If commercial development is required to be heated electrically before 2041, the demand for gas could be lower than the values presented in Table 5-4.

Costs, funding and delivery

5.2.4. As described in the Stage 1 and 2 Report, in general UK demand for gas is anticipated to decline to 2041 in spite of housing and employment growth. This is due to government legislation which aims to reduce gas consumption by 75% by 2050. Despite this, Cadent Gas is required to invest in major projects to ensure a safe and high quality supply to new and existing developments.

5.2.5. Cadent Gas assesses connections on a reactive basis, therefore assessed available capacity is constantly changing. With regards to funding sources, if a new connection to the system triggers a requirement for Cadent Gas to reinforce their network, an economic test is performed to calculate the level of customer contribution, if required at all.

Summary

5.2.6. The assessment of Colchester's gas infrastructure can be summarised as follows:

- Cadent Gas did not share the exact capacity or location of their infrastructure but provided assurance that there are no potential bottlenecks in their networks for future expansion in Colchester.
- The gas demand associated with existing employment allocations is presented in Table 5-4. This estimate (169.6 MWhr/day) is considered to be conservative as it does not account for the electrification of heating in commercial development.
- In general, UK demand for gas is anticipated to decline to 2041 due to government legislation.

- If a new connection to the system triggers a requirement for Cadent Gas to reinforce their network, an economic test is performed to calculate the level of customer contribution, if required at all.

5.3. Renewable and low carbon

Baseline

Current provision

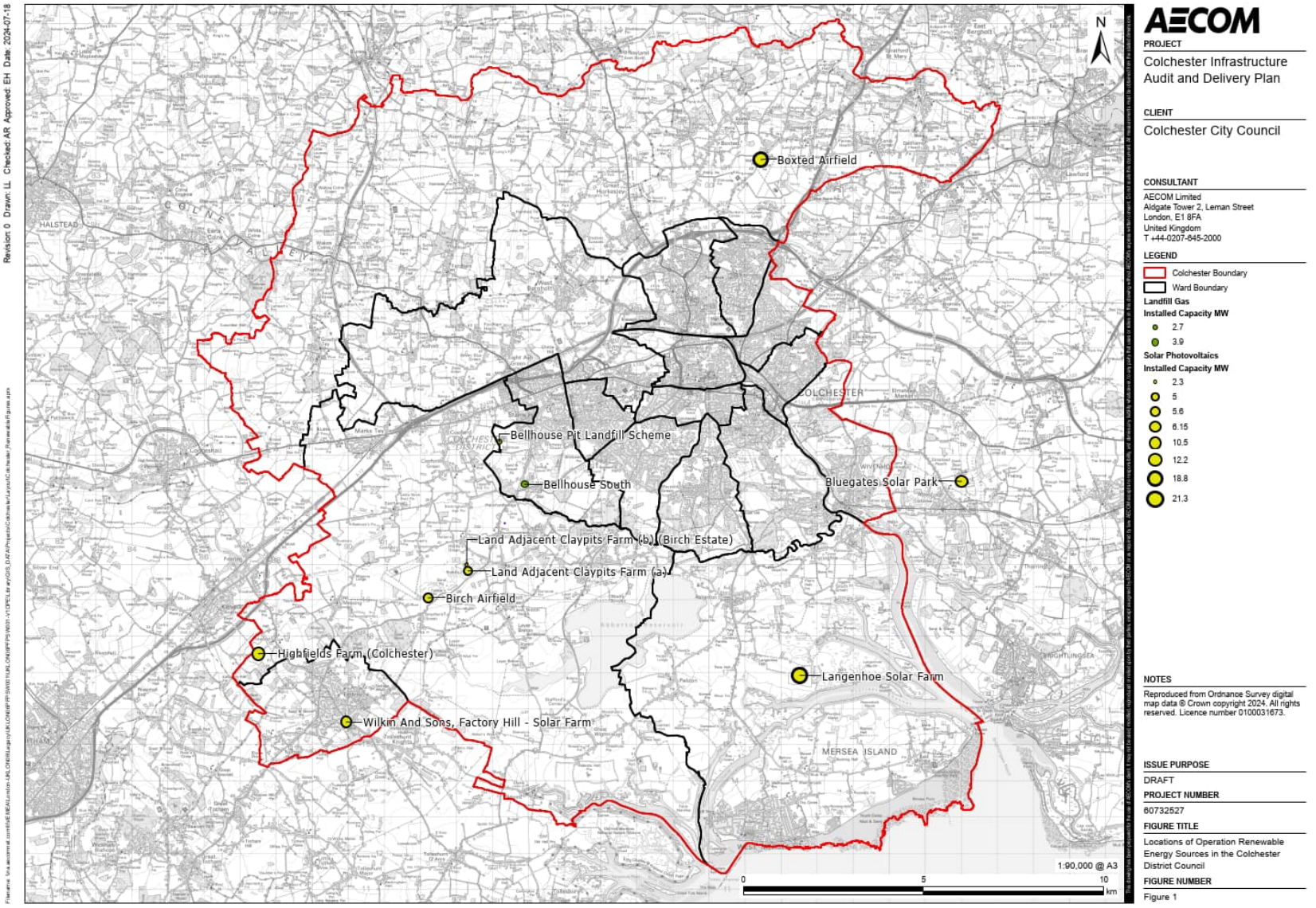
5.3.1. Colchester currently has eight solar PV installations that are over 150kW generation capacity; combined, these installations have a capacity of 81.9MW. CCC also operates two landfill gas to energy sites that combined generate 6.6MW. The location of these sites is shown in Figure 5-2 below. In addition to these large renewable energy sites, approximately half the homes within the Council's housing stock have solar PV panels installed. Other council estate assets that have solar PV installed include the Crematorium, Leisure World and Shrub End Deport.

Table 5-5 Renewable Energy Sources (over 150kW generation) in Colchester

Technology	Number of installations	Capacity
Solar PV	8	81.9 MW
Landfill Gas	2	6.6 MW

Source: Renewable Energy Planning Database (Department for Energy Security and Net Zero, April 2024)

Figure 5-2 Location of Operational Renewable Energy Sources within the Colchester Borough



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LEGEND
Colchester Boundary
Ward Boundary
Landfill Gas
Installed Capacity MW
2.7
3.9
Solar Photovoltaics
Installed Capacity MW
2.3
5
5.6
6.15
10.5
12.2
18.8
21.3

NOTES
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ISSUE PURPOSE
DRAFT
PROJECT NUMBER
60732527
FIGURE TITLE
Locations of Operation Renewable Energy Sources in the Colchester District Council
FIGURE NUMBER
Figure 1

Infrastructure requirements to 2041

5.3.2. CCC is supportive of renewable energy projects provided that they include appropriate assessment to mitigate their impact on the existing surrounding environment. According to the Renewable Energy Planning Database (Department for Energy Security and Net Zero, April 2024), five solar PV schemes additional to those noted above have been granted planning permission. As shown in Table 5-6, these schemes would increase Colchester's solar PV installations to 13, increasing solar energy capacity to 171.5MW.

5.3.3. Planning permission has been granted for four battery storage schemes. Battery storage operates by withdrawing energy from the grid during periods of low demand and then feeding the stored energy back to the grid during periods of high demand to provide greater resilience to the network. As shown in Table 5-6, the four planned schemes would provide a capacity of 6.4MW.

5.3.4. As shown in below, the development trajectory will increase the electrical demand in Colchester. Renewable energy projects have the potential to help meet this demand. However, it is worth noting that renewable energy project in Colchester feed back into the national grid. The energy they generate is not necessarily used soley to supply the Colchester demand.

Table 5-6 Known Renewable Energy Sources (over 150kW generation) in Colchester including scheme granted planning approval

Technology	Number of installations	Capacity
Solar PV	13	171.5 MW
Landfill Gas	2	6.6 MW
Battery	4	6.4 MW

Source: Renewable Energy Planning Database (Department for Energy Security and Net Zero, April 2024)

5.3.5. The Renewable Energy Planning Database only identifies renewable energy project that have been submitted for planning. Further renewable energy projects have the potential to come forward before 2041. As such, the renewable energy generation values presented in Table 5-6 have the potential to increase before 2041.

Costs, funding and delivery

5.3.6. Renewable energy projects are typically funded and delivered by private developers and operated for profit. Electricity generated by these projects is fed back into the national grid and is not necessarily used within Colchester specifically.

Summary

5.3.7. The assessment of Colchester's renewable infrastructure can be summarised as follows:

- Renewable energy projects in Colchester currently generate 81.9 MW through Solar PV and 6.6 MW through landfill gas to energy sites.
- By 2041, known renewable energy projects that have been granted planning permission in Colchester could increase renewable energy generation to 171.5 MW through solar PV, 6.6 MW through landfill gas to energy and 6.4 MW through battery energy storage.
- Renewable energy projects are typically funded and delivered by private developers.

5.4. Telecommunications and digital

Baseline

Current provision

5.4.1. There are a number of service providers offering fibre broadband across Colchester, including Colchester Fibre (part of Colchester Amphora Trading, one of Colchester City Council's commercial companies focused on infrastructure), Sky, BT OpenReach, Virgin Media, Open Info, Lightspeed, Gigaclear, NOW Broadband, Plusnet and Vodafone.

5.4.2. Broadband coverage and speeds are very good in Colchester, with 98.56% of residential and business premises having access to superfast broadband of 30Mbps and above and 41.17% of residential and commercial premises having access to Full Fibre to the Premises (FTTP) or Fibre to the Home (FTTH)[176].

5.4.3. CCC adopted its Digital Strategy[177] in 2017. The Strategy set out how Colchester will achieve world-class connectivity, including future 5G networks across both urban and rural areas over the period 2017-2022. The Strategy focused on urban Colchester, given that the financing and development of telecoms networks in rural areas is predominantly subject to public sector planning through Building Digital UK (BDUK) and not commercially driven. The focus on the urban area was to maximise investment opportunities within the local authority area.

5.4.4. CCC have since adopted their Economic Strategy[178], covering the period 2022-2025, which includes a number of initiatives and priorities to advance Colchester's digital connectivity offering, namely:

- The rollout of city centre ultrafast broadband delivered in 2017-18 as part of the Council's "Colchester Ultra-ready" campaign.
- Gigabit in urban areas – CCC secured £3.35 million in funding from the DCMS-led Local Full Fibre Networks Programme, to expand its core networks across urban Colchester in 2020-22
- Superfast Essex broadband programme – in partnership with BDUK and CCC, this provided a new fibre-based network to areas within Colchester. The Superfast Essex Broadband Programme is a £24.6 million county-wide programme. It is important to note that the deployments carried out under the Superfast Essex programme were overwhelmingly fibre-to-the-cabinet (FTTC, VDSL) and not full-fibre.
- Private sector investors have also invested heavily in Colchester subsequently to the Local Full Fibre Network (LFFN) programme, with networks across Wivenhoe, Shrub End, Berechurch and Lexden now reaching more than 18,500 premises.
- Virgin Media's network, which is capable of supporting gigabit speeds (on the download channel only), reaches almost 40,000 premises across the local authority area, and is a hybrid mix of copper, coaxial and fibre technologies[179].

5.4.5. Existing issues and barriers to delivering fibre optic broadband infrastructure in Colchester include:

- Over-build of fibre networks, leading to high upfront costs for fibre optic broadband providers and system inefficiencies, as dormant networks cause both disruption to the landscape (large-scale street works) and waste, as networks that have fewer customers become commercially unviable and therefore lose revenue. This is the key driving factor in the current MandA processes seen across the industry.

[176] https://labs.thinkbroadband.com/local/E07000071 Accessed June 2024
[177] https://cbccrmdata.blob.core.windows.net/noteattachment/CBC%20-%20How%20The%20Council%20Works%20-%20Digital%20Strategy%202017-22.pdf Accessed June 2024
[178] https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-Strategies-Colchester-Economic-Development-Strategy-2022-2025-Economic%20Strategy%20Winter22%20FINAL%20Jan%202023.pdf Accessed June 2024
[179] Colchester Fibre service provider engagement, July 2024

- Approximately two-thirds of Colchester is rural. Rural areas typically bring more logistical and financial challenges when deploying fibre optic infrastructure. These areas have been less attractive to commercial fibre programmes and have therefore been the focus of Government interventions through BDUK (Building Digital UK). The BDUK funding schemes have provided a significant funding stream, sometimes tailored to specific postcodes, to enable full-fibre networks to be built in hard-to-reach places. There is a significant element of public sector planning in these deployments, which are conducted primarily by BT Openreach, with some contracts also awarded locally to County Broadband and Gigaclear.
- Lack of up-to-date digital strategy. A digital strategy helps to prioritise areas and programmes for investment.
- An unstable market that is highly volatile and subject to mergers and bankruptcies[180] .

5.4.6. Existing opportunities for fibre optic broadband delivery in Colchester include:

- Strong reputation – Colchester has a good Ultrafast broadband network and operators that can encourage and promote future public and private investment. Colchester is held up as an exemplar by the Department for Digital, Culture, Media and Sport (DCMS) for how government intervention in instances of market failure can ultimately deliver significant private sector onward investment.
- Opportunities for the deployment of open-access models that are more streamlined and cost-efficient. In these models, multiple operators can access shared network infrastructure, rather than having to build multiple, near-identical, overlayered networks of their own.
- Shifting consumer trends – opportunities for educating the public on the benefits of fibre-optic broadband as a means of increasing local authority-wide uptake[181].

Future Baseline including planned schemes

5.4.7. The following schemes are planned in Colchester:

- Rollout of Ultrafast Broadband and 5G Colchester, to be delivered over the 2022-25 period at a cost of £48 million[182]. Funded and delivered by Swedish fibre installation specialist VX Fiber[183] in partnership with Colchester Fibre, with a funding contribution from the government's Local Full Fibre Network Fund[184], this programme aims to deliver full fibre gigabit broadband to 25,000 homes in Colchester.
- BDUK data indicates that some 80% of the properties currently without gigabit-enabling technologies will receive it from at least one provider within the 3-year window 2022-25. This will be an Openreach-driven process, with the Openreach network being accessible to any communications provider wishing to use it (and not only EE, being the consumer-facing division of the BT broadband business).

Infrastructure requirements to 2041

Future demand and supply

5.4.8. The emerging development was shared with Colchester Fibre; no feedback on demand to 2041 or infrastructure requirments associated with specific sites was received. In general, it is likely that the developer commitments required by the Local Plan, together with investment by digital infrastructure providers driven by commercial interests, will support new development without a requirement for any additional infrastructure projects.

5.4.9. Future demand and supply of fibre broadband is largely dependent upon the following:

[180] Colchester Fibre service provider engagement, July 2024
[181] Colchester Fibre service provider engagement, July 2024
[182] https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-Strategies-Colchester-Economic-Development-Strategy-2022-2025-Economic%20Strategy%20Winter22%20FINAL%20Jan%202023.pdf Accessed June 2024
[183] https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-Strategies-Colchester-Economic-Development-Strategy-2022-2025-Economic%20Strategy%20Winter22%20FINAL%20Jan%202023.pdf Accessed June 2024
[184] https://www.colchester.gov.uk/info/cbc-article/?id=KA-03627 Accessed Jan 2025

- Market factors and processes
- Funding streams – securing funding through both Central Government programmes and private partnerships
- Planning policy changes within the Local Plan and other associated planning policies – currently Policy SP6 (Infrastructure and Connectivity) of the adopted Local Plan[185] states that new properties will allow for the provision for ultrafast broadband in order to allow connection to that network as and when it is made available. This does not fully implement the principle of open access infrastructure, as some house builders have entered into exclusive partnerships with network build partners. In the worst cases, this leads to distortion of pricing and other providers being prohibited from installing to these new build areas.

Costs, funding and delivery

5.4.10. Funding is typically secured through both public and private investment. Fibre programmes are delivered by special delivery vehicles (Colchester Fibre) and other utility providers such as Sky, Virgin Media and BT Openreach, OpenInfra, Lightspeed and Gigaclear.

5.4.11. The cost of deploying full-fibre networks remains high, with uncertainty over the continuation of the debt- and equity-led financing levels seen in 2020-24. The cost of deployment underscores the importance of correct early design and the encouragement of open-access network principles.

5.4.12. On average, full fibre to the premises (FTTP) costs £650 per dwelling, however this value can be significantly higher in more challenging locations.

5.4.13. Other construction costs associated with the deployment of fibre include:

- £650 per metre to lay fibre in carriageway, where dig and backfill is required;
- £5-6,000 to erect a new telecoms pole, which should not be a default option, given the impact on the urban environment; and
- £150 per metre to lay duct and fibre in a pavement, notwithstanding the issues arising from multiple operators repeatedly digging and backfilling the same areas.

Summary

5.4.14. The timescales envisaged for the updated Local Plan to 2041 are likely to see full-fibre connectivity emerge as a ubiquitous utility infrastructure, with densification of existing fibre networks and the retirement of the legacy copper networks originally designed and deployed for telephony.

5.4.15. There remains ample scope for public-private partnerships in helping to deliver full-fibre connectivity, and Colchester is well-placed to make best use of the network assets already delivered since 2020 in this way.

5.4.16. While the process of full-fibre network build will remain commercially driven, CCC has the opportunity to shape the process to the benefit of residents and businesses alike. This may include an explicit requirement that all new builds should be able to offer full fibre from multiple providers, ideally using open-access infrastructure.

5.4.17. At the same time, it is highly desirable that a “dig once” approach is taken to utility infrastructure. Implementing this goes beyond the remit of the Local Plan however, and would require changes to the wider legislative framework, notably the New Roads and Street Works Act (NWRSA 1991).

[185] https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-Local-Plan-North-Essex-Authorities-Shared-Strategic-Section-1-Post%20Committee%20Colchester%2028th%20Jan%2021.pdf Accessed June 2024

5.4.18. The Project Schedule includes one digital infrastructure project, the rollout of Ultrafast Broadband to 25,000 premises, a collaboration between VX Fiber and Colchester Fibre which is currently underway and assumed to be funded.

5.5. Potable water

Baseline

Current provision

5.5.1. Water companies manage available water resources within Water Resource Zones (WRZ). Anglian Water (AW) is the main supplier of potable water for the Colchester area, located in the Essex South WRZ with Affinity Water providing potable water to the areas of Dedham and Wivenhoe, located in in the Brett WRZ. Both Essex South WRZ and Brett WRZ are classed as under serious water stress by the Environment Agency.

5.5.2. Water supplies to Colchester are made up of a combination of groundwater, abstractions in the Essex Chalk Aquifer, and surface water sources via Ardleigh Reservoir, where Affinity Water operate a shared reservoir with AW as part of a mutual statutory arrangement. Affinity Water are entitled to take 50% of the output from the reservoir but have agreed a share of 70/30 in favour of AW until 2025. This share will revert to a 50/50 share from 2025.

5.5.3. The existing supply of water must be managed, and future demands met. AW predict that the average daily demand for potable water will increase across their supply region to 1,217 Ml/day by 2050, with no intervention, due to an increase in population of 891,000. In addition, available water is also forecast to decrease by approximately 30% across the period due to climate change and other factors. As such, there are likely to be shortfalls across the AW region. Affinity Water provides an average of 32 Ml/d of drinking water to customers in the Brett Water Resource Zone, which includes Dedham and Wivenhoe.

5.5.4. The Essex South WRZ is predicted to go into supply deficit by 2025. This is predominantly due to a growth in demand coupled with a fall in Water Available for Use (WAFU). The fall in WAFU is due to a mixture of: climate change; the requirement to reduce water usage due to the need to restore sustainable abstractions; and reductions in output to achieve environmental destinations (reductions in amounts of water taken from sensitive environments). Table 5-7 summarises these output reductions.

Table 5-7 Reductions in Water Available for Use in Essex South WRZ

Reason for WAFU	Reduction in WAFU (Ml/d)
Restoring sustainable abstraction (recent actual average)	-3.9
Environmental destinations (by 2040)	-27
Climate Change by 2050	-1.2

Source: Anglian Water – WRMP 2024

5.5.5. The Affinity Water Resources Management Plan (WRMP)[186] notes that without additional measures, the Brett WRZ would run surplus in the supply and demand balance until 2040 i.e. there would be more WAFU than demand until this time. After 2040, it would switch to a deficit in the supply and demand balance; this deficit also only occurs if a high environmental destination scenario on abstraction reductions is realised.

[186] Affinity Water (2024) Water Resources Management Plan. Available at: https://affinitywater.uk.engagementhq.com/wrmp. (Accessed 02/12/2024).

Infrastructure requirements to 2041

5.5.6. AW produced a WRMP in 2024, with an update made in April 2025[187] that covers the period from 2025 to 2050. This document gives an outline of AW's proposed strategy to meet customer demand overcome the predicted deficit for the next 25 years.

5.5.7. AW plans to mainly manage the supply and demand balance through a demand management strategy as well as side supply strategies including imports from outside WRZs, water re-use and potentially desalination.

5.5.8. Table 5-8 outlines the proposed AW customer-side demand management measures across their supply area, which also apply to the WRZ which CCC is located in. The preferred demand management strategy includes a smart metering programme, leakage reductions and water efficiency measures. These three projects are listed within the Project Schedule.

Table 5-8 Anglian Water: Preferred Options around Demand Management - Customer Side

Measure	Action
Smart Metering	• Continue smart metering roll out to theoretical maximum of 95% • Engagement with customers to further educate on smart meter use • Reduce customer supply pipe and plumbing losses
Leakage Reduction	• Replacement and repair of leaking assets, both customer supply and network leaks
Water Efficiency	• Campaigns and targeted communications • Retrofit fit smart devices (e.g. smart showers) that can send data to the customer portal • Mandatory labelling of water usage on appliances

Source: Anglian Water WRMP 2024

5.5.9. However, demand management alone will not be enough to balance the future supply and demand and hence supply-side measures will also be required. Anglian Water have identified preferred supply-side measures for Essex South WRZ as shown in Table 5-9.

[187] Anglian Water (2025). *Water Resources Management Plan 2024.* Available at: Main Document – WRMP24 (Accessed: 23/06/2025).

Table 5-9 Preferred Supply-Side Options for Essex South WRZ

Option I.D	Supply Side Options
DA01	Adjustment to 1:200 drought
EE01	Adjustment to existing potable water export
E102	Adjustment to existing potable water import
EXS10	Holland on Sea desalination (sea water) (26Ml / day)
EXS19	Colchester WRC direct to Ardleigh Reservoir (no additional treatment)
EXS7	Essex South WTW Backwash water recovery
LC01	Adjustment for Licence cap scenario 8
OP12	AMP8 OPI Adjustment

Source: Water Resource Zone Summaries: Essex South[188]

5.5.10. In relation to adjusting potable water imports, the WRMP does not outline the specific sources of raw water that will supply the proposed transfers. However, due to the flexibility of Anglian Water's strategic grid and the potable transfer network, this is likely to come from a range of existing sources within other WRZs which have the potential for input from new strategic resources such as the proposed Fens and Lincolnshire Reservoirs (two new reservoirs that are proposed outside Colchester to supply water across the Anglian Water area) as demand increases and existing abstractions are reduced or changed.

5.5.11. However, planning, construction and filling timeframes mean, even with the significant early work already undertaken, the Lincolnshire Reservoir will not come online until 2039, and this date is considered ambitious. Anglian Water will have a short-term regional deficit (i.e. wider than just the Essex South WRZ) until the reservoirs are in supply. In order to address the shortfall of water left by climate change and licence capping for the Essex South WRZ, a new supply-side option is required before the reservoirs are available. Anglian Water have little opportunity to utilise any surplus ground or surface water, therefore Anglian Water are progressing with plans for indirect water reuse at the Colchester Water Recycling Centre (WRC). Rather than discharge all the treated effluent from the WRC to the estuary, Anglian Water will treat some of the already treated effluent again using membrane technology before discharging and storing it in a raw water storage reservoir (Ardleigh) where it will mix with river water.

5.5.12. Anglian Water have been granted planning permission by West Suffolk Council, Babergh and Mid Suffolk District Council and Colchester City Council for a 69km section of pipeline between Bury St Edmunds and Colchester which will be capable of transferring up to 25 Ml/d. As part of this development, an 18 kilometre spur from the proposed Whelnetham to Wherstead section will import potable water to an existing water reservoir at Great Horkesley.

5.5.13. The combined impact of the proposed demand management measures and supply side options in the Essex South WRZ results in a forecast balance of supply and demand by 2050.

5.5.14. Affinity Water also propose a range of continued demand management option implementation across all of their WRZs including the Brett WRZ. These options include:

- Leakage reduction;
- Adopting and installing different metering technologies;
- Helping customers to reduce their water consumption;
- Working with business customers and retailers to reduce their water consumption; and

[188] Anglian Water WRMP – WRZ Summary for Essex South (April 2025) , accessed 23/06/2025

- Considering temporary options to reduce water usage in times of significant drought.

5.5.15. Regarding supply-side options, Affinity Water propose refinements to operational rules and governance of Ardleigh reservoir where the share of water from the reservoir will move from the current 70:30 split in favour of Anglian Water to a 50:50 share increasing the volume available to Affinity in the Brett WRZ; this requires no notable investment.

5.5.16. In the longer term, if high environmental destination (abstraction reduction) scenarios are required, then in conjunction with Water Resources East[189] (WRE) regional planning[190] and Anglian Water, imports would be considered drawing on the Colchester effluent re-use scheme or the Holland-on-Sea desalination scheme.

Costs, funding and delivery

5.5.17. There are high costs associated with both the customer-side (demand management) schemes and the supply-side schemes proposed by AW and Affinity for the WRZ supplying Colchester. The projects are to be funded by AW through the Ofwat-regulated Price Review process which sets the price that AW can charge its customers for the next five year investment period or Asset Management Period (AMP). This review happens every five years and the recently determined Price Review PR24 has agreed prices rises for AMP8 (which runs from 2025-2030) . It should be noted that although the customer side schemes are funded by AW, proposed price increases require agreement from Ofwat which may not be approved to the level of funding needed.

5.5.18. Costs for demand management schemes are not broken down by WRZ and are instead presented AW-wide as an indication. Total costs[191] to 2050 are £4.7bn, as can be seen below in Table 5-10 for customer-side demand management schemes.

Table 5-10 Customer-side Demand Management Scheme Costs for the Anglian Water Region

Demand Management Strategy Action	Cost (£m)
Smart Metering	243
Water Efficiency (household + non-household) (operational costs only)	97
Leakage Reduction (mains and household)	4,370
Total	**4,710**

Source: Anglian Water (2023), Demand Management Preferred Plan

5.5.19. Supply-side costs are published for each Anglian Water WRZ[192]. However, not every preferred option listed within Table 5.3 is identified. Affinity Water do not propose significant supply-side cost intervention within the Local Plan period.

5.5.20. CAPEX costs, where available for Anglian water's proposals, are outlined in Table 5-11. For those side-supply schemes that are listed, total costs across the Essex South WRZ to 2050 is £533.9m. However, the total cost is likely to be higher as not all options have cost estimates available at the time of writing. It is also noted that these costs cover the wider supply zones which provide water to other Local Authority areas (particularly Braintree District Council) and not just to the Colchester local authority area.

[189] WRE is the independent, not-for-profit membership organisation pioneering a collaborative, cross-sector approach to water resources and integrated water management planning in Eastern England
[190] WRE (2023) Regional Water Resources Plan for Eastern England. Available at: WRE-Regional-Water-Resources-Plan-for-Eastern-England.pdf
[191] Anglian Water (2023). *Demand Management Preferred Plan.* Available at: V3 Demand Management Preferred Plan (anglianwater.co.uk) (Accessed: 28/11/2024).
[192] Anglian Water (2023). *Supply-side Option Development.* Available at: V3 Supply side option development (anglianwater.co.uk) (Accessed: 28/11/2024).

Table 5-11 CAPEX costs

Essex South	CAPEX (£k)
Holland on Sea desalination (sea water) (26Ml / day)	394,661.52
Colchester WRC direct to Ardleigh Reservoir (no additional treatment)	138,995.01
Essex South WTW Backwash water recovery	277.67
Total	533,934.20

Source: Anglian Water (2023). Supply-side Option development.

5.5.21. The costs set out above are for schemes which cover the entire AW region, and so it is not appropriate to attribute all costs to growth arising in Colchester. To quantify at least some portion of potable water costs to 2041, connection costs of new development sites to the water supply network have been estimated.

5.5.22. A high-level benchmarking activity has therefore been conducted utilising published standards from AW[193]. For 2025/26, the water infrastructure charge per property is £502. Table 5-12 applies this benchmark to the development trajectory and thus indicates that the estimated cost of potable water infrastructure to 2041 is £10,568,606. It should be noted that the charge is likely to rise with inflation.

Table 5-12 Estimated potable water connection costs to 2041

	2025/26 to 2029/30	2030/31 to 2035/36	2036/37 to 2041/42	Total
Water Infrastructure Charge	£2,834,794	£5,424,612	£2,309,200	£10,568,606

5.5.23. In terms of connection of new development sites to the water supply network, the Water Industry Act (1991) allows for water companies to reclaim the cost of water and sewerage network upgrades from developers as part of the normal requisition process. Therefore, the Project Schedule assumes that costs of connections are funded and would be paid by the developer.

5.5.24. Owing to the connectivity of WRZs, the spatial location of growth within Colchester does not materially influence investment required in water resource management. All growth within Colchester is in an area classified by the Environment Agency to be under severe stress, and significant investment is required by AW in particular to meet the dual challenge of population growth alongside supply-side reductions in WAFU due to climate change and environmental improvement need.

5.5.25. Therefore, new development will need to invest in water efficiency measures to support the demand reduction actions required for both water companies to be able to continue to ensure adequate supply of water and to be in-keeping with the government strategy to reduce water demand by 2050. Setting planning policy which requires per capita consumption (PCC) to be limited will assist in water companies balancing future supply and demand.

5.5.26. The 2025 Water Cycle Study (WCS) produced to support the Local Plan has set out evidence for justifying a PCC policy of 85 l/p/d for new dwellings, including evidence of how this can be achieved without the need for development (or community) level water reuse technology. This means the target, if set in new policy, can reasonably be achieved through the provision of high efficiency fixtures and fittings.

[193] Anglian Water, (2025); Infrastructure Charges for Residential - 2025/2026.

5.5.27. Although AW will provide residential development with potable water where development areas are allocated under the Local Plan, AW and Affinity Water may no longer routinely meet potable water demand for non-residential growth where there is no legislative requirement to do so. Non-residential growth should consider investment in water management to move towards a water neutral position such that demand for mains water is minimised; this would take the form of ensuring water efficiency is maximised, considering the use of rainwater harvesting or recycling and considering whether some uses of water can be sourced directly from the environment rather than mains supply.

5.5.28. In addition to water efficiency, the requirement for investment in water distribution infrastructure is influenced by the locality and scale of employment growth, as both water company and developer investment in new water supply mains and pumping stations may need to be higher where growth is concentrated.

Summary

5.5.29. Key findings relating to potable water are as follows:

- AW is the main potable water supplier to Colchester with small areas of Dedham and Wivenhoe provided by Affinity Water.
- Colchester is located within the AW Essex South WRZ and Affinity Water's Brett WRZ which are classed as under serious water stress by the Environment Agency.
- The main issues affecting the WRZs' supply-demand balance are population growth, restoring sustainable abstraction and reductions to achieve environmental destinations. The AW Essex South WRZ is expected to go in to supply deficit by 2025 if no measures are put in place. The Brett WRZ would still operate a surplus in its supply and demand balance until 2040 even without additional measures.
- AW plans to overcome the predicted deficit mainly through a demand management strategy as well as side supply strategies including imports from outside WRZs, water re-use and, depending on the scale of future environmental needs, through desalination. The preferred demand management strategy includes a smart metering programme, leakage reductions and water efficiency measures.
- AW are funding overall improvements to their networks and making efforts to reduce water consumption.
- There are three demand side potable water projects in the Project Schedule. These relate to:

– smart metering (total capital expenditure of £243m);

– leakage reduction (total capital expenditure of £4,370m);

– water efficiency measures (operational cost of £97m); and

– The Project Schedule also contains four supply side projects relating to AW's strategy to reduce net transfers to 2050 (total identified capital expenditure of £533.9m for the entire Essex South WRZ).

- Total capital costs of the listed projects are £5,146.9m, however it is noted that these projects will cater for demand not just from Colchester but for a wider geographical area, and for this reason the costs have not been included in the grand total presented in chapter 0. The projects will be funded by AW through their Price Review (PR24) and so there are no funding gaps.
- Owing to the connectivity of WRZs, the spatial location of growth within Colchester does not materially influence investment required in water resource management.
- Developers are to fund the cost of development connections. Developers are to fund the cost of development connections. A high-level benchmarking exercise indicates that the cost of connection charges to provide potable water infrastructure with the potential emerging allocations would be £10.5m. This sum has been included in the Project Schedule.

5.6. Wastewater

Baseline

Current provision

5.6.1. Settlements within the Colchester local authority area are served by 18 AW owned Water WRCs that treat wastewater from both residential and employment sources and discharge the water back to the environment. The locations of the WRCs across Colchester, and the drainage catchment areas they serve are presented in Figure 5-3. AW operate their WRCs subject to permits set by the Environment Agency which have conditions which must be met with regards to the flow and quality of discharges of the final treated effluent.

5.6.2. Analysis of the revised development trajectory and site allocations has identified that 13 of the 18 WRCs in the CCC would be likely to receive wastewater associated with allocations.

5.6.3. It is expected that the amount of surface water that enters the AW sewer network in these WRC catchments will increase due to increased rainfall, as a result of climate change, and increased wastewater generated from expected growth. AW has identified this in their Drainage and Wastewater Management Plan (DWMP) and recognise that new or improved foul and surface water infrastructure may be required accordingly.

5.6.4. As part of the DWMP process, water recycling catchments across the AW network have been risk-assessed by AW to understand the impact of future growth and climate change to 2050. AW's current assessment of likely population growth in each of the catchments is likely to differ from Colchester Local Plan numbers as the spatial strategy develops, but represented a best estimate at the time of DWMP completion in 2023 (using information gathered between 2020 and 2022).

5.6.5. AW have provided a Red, Amber and Green (RAG) rating for the headroom available for future growth at each of the 18 WRCs that serve Colchester; this is presented in Table 5-13 alongside estimates of population growth within each WRC catchment (as deterimed by AW for the DWMP). The rating gives a qualitative summary of whether growth in each WRC may be initially restricted by available treatment capacity and where future investment is likely to be required.

5.6.6. Headroom is available for the scale of population growth anticipated in the DWMP at eight of the 17 WRCs identified. This availability is dependent on existing commitments and the preferred spatial strategy taken forward. A further six have some available headroom for future development but are likely to require phasing of development to enable the planned investment to come forward whilst capacity improvements are made.

Figure 5-3 Location of Water Recycling Centres within Colchester District

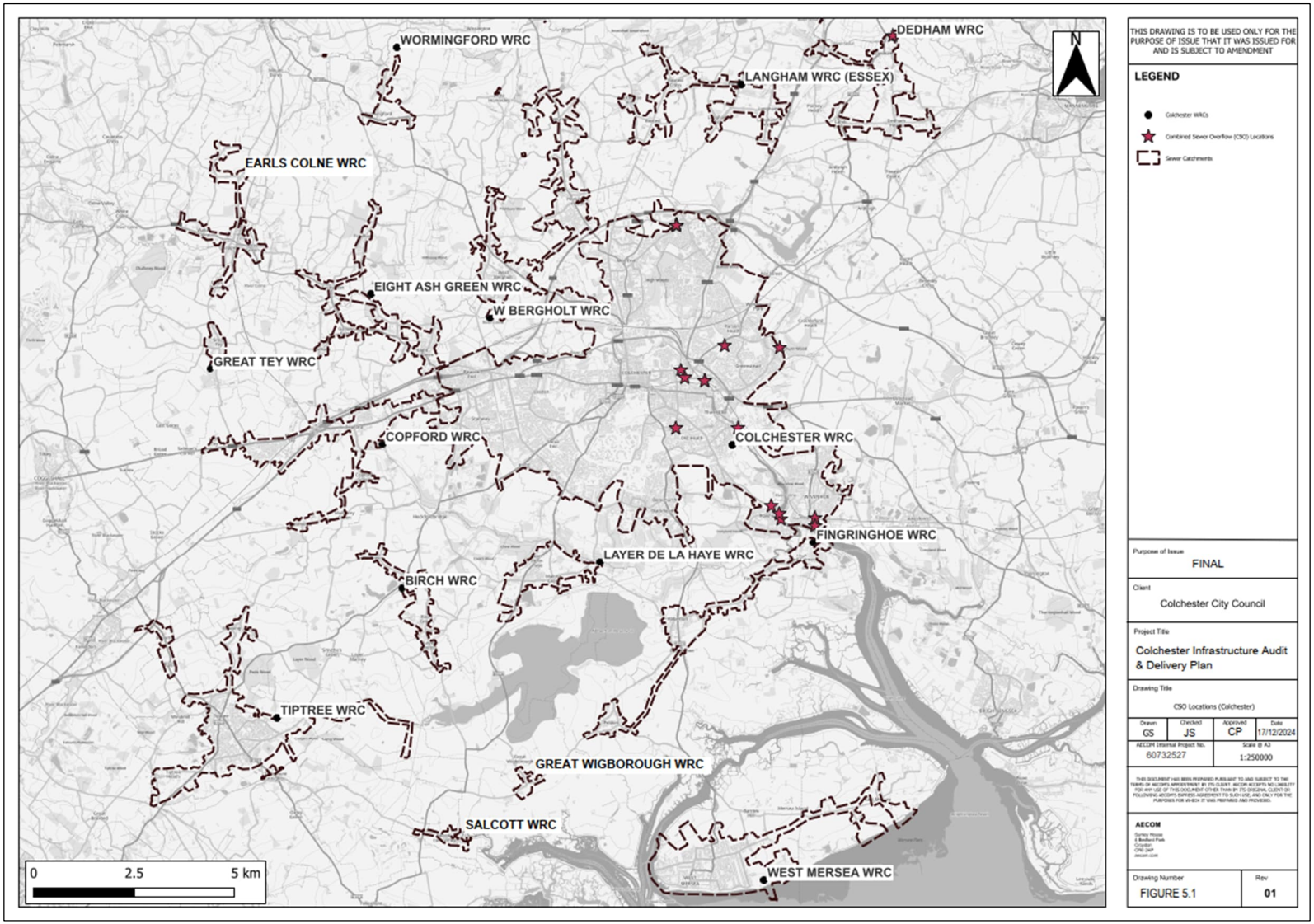


Table 5-13 RAG Rating for future growth at WRCs serving Colchester

Settlements in Colchester	WRC Catchment serving settlement	Population 2021	Population 2030	Population 2050	WRC Headroom
Rowhedge	Colchester	140,797	164,214	174,887	
Wivenhoe					
Birch	Birch	1,008	1,084	1,165	
Layer Breton					
Chappel	Earls Colne	4,477	4,770	4,979	
Wakes Colne					
Copford, Copford Green and Easthorpe	Copford	4,884	6,110	6,469	
Marks Tey					
Dedham	Dedham	2,265	2,427	2,608	
Eight Ash Green	Eight Ash Green	3,148	3,807	4,044	
Aldham					
Fordham					
Fingringhoe	Fingringhoe	2,034	2,314	2,474	
Abberton and Langenhoe					
Peldon					
Great Tey	Great Tey	771	955	1,014	
Great and Little Wigborough	Great Wigborough	141	155	166	
Langham	Langham (Essex)	1,848	2,190	2,332	
Boxted					
Layer de la Haye	Layer de la Haye	1,719	1,964	2,099	
Little Horkesley	LT Horkesley Gardenfield	35	38	40	
Mount Bures[194]					
Salcott	Salcott	373	398	421	
Tiptree	Tiptree	10,819	12,143	12,999	
Messing					
West Bergholt	West Bergholt	5,659	6,388	6,832	
Great Horkesley					
West Mersea	West Mersea	9,434	10,604	11,234	
East Mersea					
Wormingford	Wormingford	359	385	413	

	Headroom available for proposed future growth
	Some headroom available for proposed future growth – may require phasing to allow for future planned investment to come forward
	No headroom for the proposed level of future growth, and no immediate plans for future investment

Source: Anglian Water 2024 (via email provided for the IDP)

5.6.7. The AW risk assessment highlights available headroom in the Dedham, Langham (Essex) and West Bergholt WRC catchments to be the most critical, based on the DWMP estimates of growth.

[194] No public sewer system

5.6.8. It should be noted that part of the Dedham and Earls Colne WRCs catchments are located in adjacent local authority areas or catchments (Babergh District Council and the Braintree catchment respectively), and therefore available headroom may have cross boundary implications for future development. The WCS requested details for growth within these WRC catchments beyond CCC's area, but neither Babergh nor Braintree Council's were able to identify growth in these catchments at this stage of their Local Plan process.

5.6.9. Further to the 2023 DWMP, the WCS completed for CCC has considered the impact of the latest development trajectory on capicity at each WRC. This identified that 13 of the 18 WRCs in the CCC area have growth within their drainage catchments (either due to existing commitments or because of proposed new allocations). These WRCs are: Birch, Colchester, Copford, Dedham, Earls Colne, Eight Ash Green, Fingringhoe, Great Tey, Langham, Layer de-la-Haye, Tiptree, West Bergholt and West Mersea.

5.6.10. The WCS quantified the baseline capacity at each of these 13 WRCs as summarised in Table 5-14.

Table 5-14: Baseline (pre-growth) capacity at WRCs likely to receive growth

Site Name	Permitted Capacity[195] Remaining
BIRCH WRC	45%
COLCHESTER WRC	10%
COPFORD WRC	33%
DEDHAM WRC	No capacity
EARLS COLNE	9%
EIGHT ASH GREEN WRC	32 %
FINGRINGHOE WRC	No capacity
GREAT TEY WRC	33%
LANGHAM WRC (ESSEX)	No capacity
LAYER DE-LA-HAYE WRC	32%
TIPTREE WRC	19%
WEST BERGHOLT WRC	No capacity
WEST MERSEA WRC	29%

Source: CCC Water Cycle Study, 2025

5.6.11. The WCS then calculated capacity once all planned housing growth has occurred in each WRC catchment. This included a 10% allowance for employment growth and made allowances for a potential increase in water ingress into the sewer system. The results are shown in **Error! Reference source not found.** and summarised as:

- Three of the 13 WRCs receiving growth would have sufficient flow capacity within their existing permit to accommodate the level of proposed growth – these are: Birch, Layer de-la-Haye, and West Mersea WRCs. Growth at these WRCs does not represent a significant infrastructure barrier.
- Four WRCs are already at capacity and need either a new discharge permit and/or infrastructure upgrades – these are: Dedham, Fingringhoe, Langham and West Bergholt.
- The remaining six WRCs would exceed their capacity once all growth is considered and hence treatment capacity is a potential barrier to growth in these locations.

[195] Based on permitted Dry Weather Flows (DWF) compared to measured DWFs

Table 5-15: WRC Headroom capacity after growth - summary

Water Recycling Centres	Total dwelling numbers assessed	DWF Permitted flow (m3/d)	Current measured DWF (Q80) (m3/d)	Headroom Capacity pre-growth (m3/d)	Post growth DWF estimate (m3/d)	Headroom Capacity post-growth (m3/d)	Percentage capacity after growth
Birch	17	300	163.7	136	170	130	43%
Colchester	11,138	29,284	26,494	2,789	31,211	-1,927	-7%
Copford	3,460	1,650	1,102	547	2,568	-918	-56%
Dedham	15	610	659.5	-50	666	-56	-9%
Earls Colne	237	934	847.0	87	947	-13	-1%
Eight Ash Green	516	650	441.7	208	660	-10	-2%
Fingringhoe	135	367	374.1	-7	431	-64	-18%
Great Tey	156	142	95.0	47	161	-19	-13%
Langham	1,093	420	483.6	-64	946	-526	-125%
Layer de-la-Haye	140	380	258.5	121	318	62	16%
Tiptree	1,292	2,400	1,938	461	2,486	-86	-4%
West Bergholt	665	1,430	1,498	-69	1,780	-350	-24%
West Mersea	465	2,000	1,429	570	1,626	374	19%

Source: CCC Water Cycle Study, 2025

5.6.12. For the ten WRCs where capacity is exceeded, either now or by the end of the plan period, the WCS has assessed the environmental capacity of the receiving watercourses in relation to potential increased discharge permits. This assessment used water quality modelling to ascertain whether Water Framework Directive (WFD) Regulations standards could be met in the future subject to improvements in discharge quality at each WRC which are within Technically Achievable Limits (TAL). This assessment was undertaken to determine whether there is potential for new or improved treatment processes to be implemented at each WRC as a result of growth and still meet statutory water quality targets. This assessment also considered requirements of connected water dependent habitats, designated bathing waters and designated shellfish areas.

5.6.13. The water quality modelling exercise identified that there are treatment infrastructure solutions available within TAL at each of the 10 modelled WRCs which would be implementable to ensure no deterioration in current water quality. It also showed that growth would not be a factor in future WFD targets being acheieved. However, it identified that there is likely to be a varying degree in scale of water treatment infrastructure solutions required at each WRC and that the plans for future investment are also at different stages of planning. In some cases, growth-based schemes have been funded in AMP8 i.e. the current 5 year investment period from 2025 to 2030, whilst for some WRCs there is a short-term capacity issue with no identified solution in the current AMP8 Business Plan or the longer term DWMP.

Infrastructure requirements to 2041

5.6.14. A summary of the infrastructure provision need for each WRC (as determined by the WCS) is set out in **Error! Reference source not found.**. This provides an overall commentary of where funding is secured and where it is not.

Table 5-16: Summary of WRC infrastructure investment needs (where the WRC would serve growth)

WRC	Is there capacity for all growth to 2041?	When would capacity be exceeded?			Process upgrade required (for water quality)	Is early investment planned in AMP8 (to 2030)?	DWMP solution proposals		Commentary
		2025-2030 (AMP8)	2030-2035 (AMP9)	2035-2041 (AMP10 +)			Medium Term Plan (to 2035)	Long Term Plan (2025 - 2050)	
Birch	Yes	N/A			N/A	N/A	Networks – mixed strategy with main solution of SuDS	50% surface water removal	No infrastructure change requirements
Colchester	No	Capacity*	Exceeded from 2031 onwards – no growth plan yet identified		Minor (within TAL)	No – but capacity available in this period	Wait and see**	Wait and see	Insufficient capacity for all growth – a solution to protect water quality is possible, but exact solution is not yet identified or planned funding not yet secured.
Copford	No	Capacity	Exceeded from 2033 onwards – but upgrade identified before 2030		Significant but within TAL	Yes – investment planned	WRC - Infiltration reduction / new Dry Weather Flow permit (allowing more treated discharge). Network - Mixed strategy with main solution of SuDS	50% surface water removal Possible transfer of flows to Eight Ash Green WRC	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned before 2030 with long term strategy set out. Short term funding confirmed, but longer term funding to be agreed.
Dedham	No (from baseline)	No baseline capacity			Minor (within TAL	No – investment not planned, but only 15 dwellings planned so upgrade may not be required	Network - Mixed strategy with main solution of SuDS	50% surface water removal	No current capacity – a solution to protect water quality is possible but is not planned until 2035. However, growth numbers are small and potentially acceptable with a minor change in discharge permit. There may be early phasing implications. Funding needs not confirmed.
Earls Colne	No	Capacity		Exceeded from 2040 but minor works identified before 2030	Minor (within TAL	Yes – investment planned	25% surface water removal	25% surface water removal	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned before 2030 with long term strategy set out. Short term funding confirmed, but longer term funding to be agreed.
Eight Ash Green	No	Capacity		Exceeded from 2038 but solution identified before 2035 (DWMP)	Within TAL – but some ammonia changes may be required	No – but capacity available in this period	Network - Mixed strategy with main solution of SuDS	50% surface water removal	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned in the medium term and long term within the DWMP but funding to be agreed for medium to longer term strategy.
Fingringhoe	No (from baseline)	No baseline capacity			Minor (within TAL	Yes – investment planned	DWMP identifies the need for WRC capacity increase		No baseline capacity, a solution to protect water quality is possible and investment works are planned before 2030 (current AMP) – there may be

WRC	Is there capacity for all growth to 2041?	When would capacity be exceeded? 2025-2030 (AMP8)	2030-2035 (AMP9)	2035-2041 (AMP10 +)	Process upgrade required (for water quality)	Is early investment planned in AMP8 (to 2030)?	DWMP solution proposals: Medium Term Plan (to 2035)	Long Term Plan (2025 - 2050)	Commentary
									early phasing implications. Early funding required is secured.
Great Tey	No	Capacity		Exceeded by 2035 – no longer term strategy identified	Minor (within TAL	No – but capacity available in this period	No solutions identified		Insufficient capacity for all growth – a solution to protect water quality is possible, but exact solution is not yet identified or planned. No funding identified.
Langham	No (from baseline)	No baseline capacity			Significant but within TAL	No investment planned and there is no baseline capacity	No solutions identified		No current capacity – a solution to protect water quality is possible but there are no plans to improve the WRC in the current AMP or longer term DWMP strategy. There will be phasing implications and no funding is secured.
Layer de-la-Haye	Yes	N/A			N/A	N/A	None		No infrastructure change requirements
Tiptree	No	Capacity		Exceeded from 2038 but solution identified before 2035 (DWMP)	Significant but within TAL	No – but capacity available in this period	Investigate	Potential wetland	Insufficient capacity for all growth – a solution to protect water quality is possible, and investment is planned (but funding not yet secured) in the long term within the DWMP.
West Bergholt	No (from baseline)	No baseline capacity			Within TAL – but some upgrades may be required	No investment planned and there is no baseline capacity	Network - Mixed strategy with main solution of SuDS	50% surface water removal	No current capacity – a solution to protect water quality is possible but is not planned until 2035. There may be early phasing implications. Funding need s to be confirmed.
West Mersea	Yes	N/A			N/A	N/A	Network - mixed strategies with main solution of SuDs	25% surface - water removal	No infrastructure change requirements

Source: Anglian Water DWMP (2023), and CCC WCS (2025)

* Colchester WRC has an interim capacity issue until 2028 associated with flow monitoring limitations – see WCS for more details

** AW have not identified a specific infrastructure solution at Colchester in their current Business Plan (to 2030) nor their DWMP, but have requested land around the WRC is safeguarded and allocated in the Local Plan for future expansion, acknowledging that a growth scheme will be required in the longer term

Costs, funding and delivery

5.6.15. As set out in **Error! Reference source not found.**, AW's DWMP includes strategies to increase both treatment and drainage capacity in schemes to 2050, largely through through surface water management and upsizing, and in emerging schemes in catchments susceptible to emerging growth.

5.6.16. At a company level, the DWMP has highlighted that between 2025-2050, £5bn will be invested by AW in their wastewater infrastructure to mitigate future risks to the wastewater network and recycling centres, including for the impacts of expected growth and climate change. In that period, up to £836m will be spent across the Essex Rivers Catchment Partnership area (which CCC is located within) by AW to manage future risks, including new permits and increases in WRC capacity, removing surface water from the network and investment in Sustainable Drainage Systems (SuDS).

5.6.17. A number of settlements have been forecast as areas with high growth between 2025-2050. As such, AW have identified expected investment required to meet the long-term growth at the catchment scale. Although these funds have not been specifically allocated to projects (or secured through the current AMP), each water recycling catchment in each area has been examined and a strategy produced.

5.6.18. AW's DWMP provides further details for asset investment in the medium term (to 2035) and the longer term (to 2050) specifically for the WRCs (and their catchments) in the Colchester local authority area as presented in **Error! Reference source not found.**.

5.6.19. Analysis of AW's Business Plan shows the following total costs identified for WRCs which do have secured funding in AMP8 to 2030:

- Earl's Colne WRC - £90,000
- Fingringhoe WRC - £900,000
- Copford WRC - £11,000,000

5.6.20. These three WRCs are listed in the Infrastructure Project Schedule as funded schemes (see Appendix A).

5.6.21. There are nine WRC catchments for which the DWMP identifies medium term to longer investment in capacity solutions (albeit with funding identified at a strategic level but not yet secured). These are listed within the Infrastructure Project Schedule (see Appendix A).

5.6.22. There may be potential for alternative treatment solutions to be explored by developers where growth is proposed in areas where there is an immediate baseline capacity issue that will not be resolved under the next AMP period.

5.6.23. Wastewater infrastructure in the Essex Rivers Catchment Partnership area is expected to see up to £836m in investment to 2050. Whilst the Colchester local authority area only represents part of the area likely to receive this investment, the values give an indication of the scale of investment in wastewater infrastructure planned by Anglian Water in the CCC area (and neighbouring authorities) over the Local Plan period and beyond.

5.6.24. Regular maintenance across the network will be required to ensure that the rest of the network that is not expecting population growth is fit to function and has headroom and network capacity for predicted rainfall increases.

5.6.25. Connection costs of new development sites to the sewerage network have been estimated utilising published standards from AW[196]. For 2025/26, the sewerage infrastructure charge per property is £403. Table 5-17 applies this benchmark and indicates that the estimated cost of wastewater infrastructure to 2041 is £8,484,359. It should be noted that the charge is likely to rise with inflation. These costs are included in the Project Schedule.

[196] Anglian Water, (2025); Infrastructure Charges for Residential - 2025/2026.

Table 5-17 Estimated sewerage infrastructure charge costs to 2041

	2025/26 to 2029/30	2030/31 to 2035/36	2036/37 to 2041/42	Total
Sewerage Infrastructure Charge	£2,275,741	£4,354,318	£1,853,800	£8,484,359

5.6.26. Costs to connect new developments to the network are charged to the developer. Connection costs are subject to the size of the development and service requirements.

Summary

5.6.27. Key findings relating to wastewater are as follows:

- There are 18 WRC's across the Colchester local authority area with three of these WRC catchments located partly in adjacent local authority areas or catchments. 13 of these WRC would have allocated sites within their drainage catchments.
- The demand for wastewater services within these 13 WRCs will increase due to population growth as well as climate change leading to more foul and surface water entering the network.
- The CCC WCS has assessed the impact of the preferred site allocations against WRC capacity including a comparison against the assumptions of AW's DWMP. This identified nine WRCs where capacity would be exceeded (if no improvement plan is implemented) when also considering committed growth which has not yet been connected to WRCs.
- Three of affected WRCs have sufficient capacity for all planned growth and do not need significant infrastructure investment (Birch, Layer de-la-Haye and West Mersea).
- The other 10 WRCs need some form of infrastructure intervention ranging from upgrades to changes in discharge permits, but the WCS has determined these changes are feasible within TAL and hence can be delivered at some point in the future to protect water quality and connected habitats/designated sites.
- The degree of infrastructure intervention required varies for these 10 WRCs, and the extent of funding secured as well as when the intervention will take place is variable:
    - Three WRCs have solutions identified in the current AW AMP8 investment period and have funding secured (Copford RWC, Fingringhoe WRC and Earls Colne WRC).
    - Two WRCs have capacity in the short term, and have longer term solutions identified but not yet fully funded (Eight Ash Green WRC and Tiptree WRC).
    - Two WRCs have capacity in the short term but capacity will be exceeded and without long term investment plans identified or funding secured (Colchester WRC and Great Tey WRC);
    - Two WRCs have no immediate capacity and no immediate investment plans in AMP8 (to 2030) but do have medium to longer term solutions identified which are yet to be funded (Dedham WRC and West Bergholt WRC)
    - One WRC (Langham) does not have capacity and currently has no short to longer term solutions identified.
- Early phasing of growth in Dedham, West Bergholt, and Langham may be restricted until improvement plans are developed and funded for 2030 onwards (AMP9 or AMP10). Fingringhoe WRC also has no baseline capacity, but AMP8 improvement plans are included in AW's AMP8 Business Plan and hence early phasing impacts may only be an impact for the first 2 or 3 years of the Plan Period.
- As part of the DWMP the best value plan proposes medium- and long-term solutions for the various WRCs as:

  - Remove surface water from the sewerage system using SuDS and traditional strategies.
  - Remove unrequired network flows.
  - Increase capacity, particularly at WRCs, and
  - Introduce targeted education schemes in tandem with partners to reduce demand.

- Across their company area, AW are investing £5 billion between 2025-2050 to mitigate future risks to the wastewater network from expected growth and climate change. Of this, £836m is estimated to be invested in wastewater infrastructure solutions within the Essex Rivers Catchment Partnership in which CCC is located. This gives an indication of the scale of investment that will be required in Colchester and surrounding local authority areas.
- For improvements at the identified WRCs in the PR24 Business Plan (Earls Colne, Copford and Fingringhoe), AW are investing approximately £11.97 million between 2024 to 2030. This AMP8 funding will come before 2030. This is reflected in in the Project Schedule.
- A high-level benchmarking exercised indicates that the cost of providing wastewater infrastructure with the potential emerging allocations would be £8.4 million. These costs are also included in the Project Schedule. Costs associated with connecting new developments to the network are charged to the developer.

5.7. Flood defences

Baseline

Current provision

5.7.1. The Colchester City Council area is predominantly at risk from tidal, fluvial and surface water sources.

5.7.2. Figure 5-4 shows that Colchester is predominantly located in Flood Zone 1 (low risk of fluvial and/or tidal flooding). Areas located in Flood Zone 2 (moderate risk of fluvial and/or tidal flooding) and Flood Zone 3 (high risk of fluvial and/or tidal flooding) are primarily confined to the channels and immediate floodplain surrounding the main rivers and ordinary watercourses throughout the catchment. An extensive area of Flood Zone 3 is concentrated in the estuarine locations around Mersea Island.

5.7.3. This presents a fluvial/tidal flood risk to the urbanised areas of Colchester, Wivenhoe, West Mersea, and Dedham, and to the rural areas of the local authority area, including the low-lying areas to the south. Several ordinary watercourses, land drains, ponds and lakes within the local authority area also present a risk of fluvial flood risk, however mapped outputs are unavailable for these.

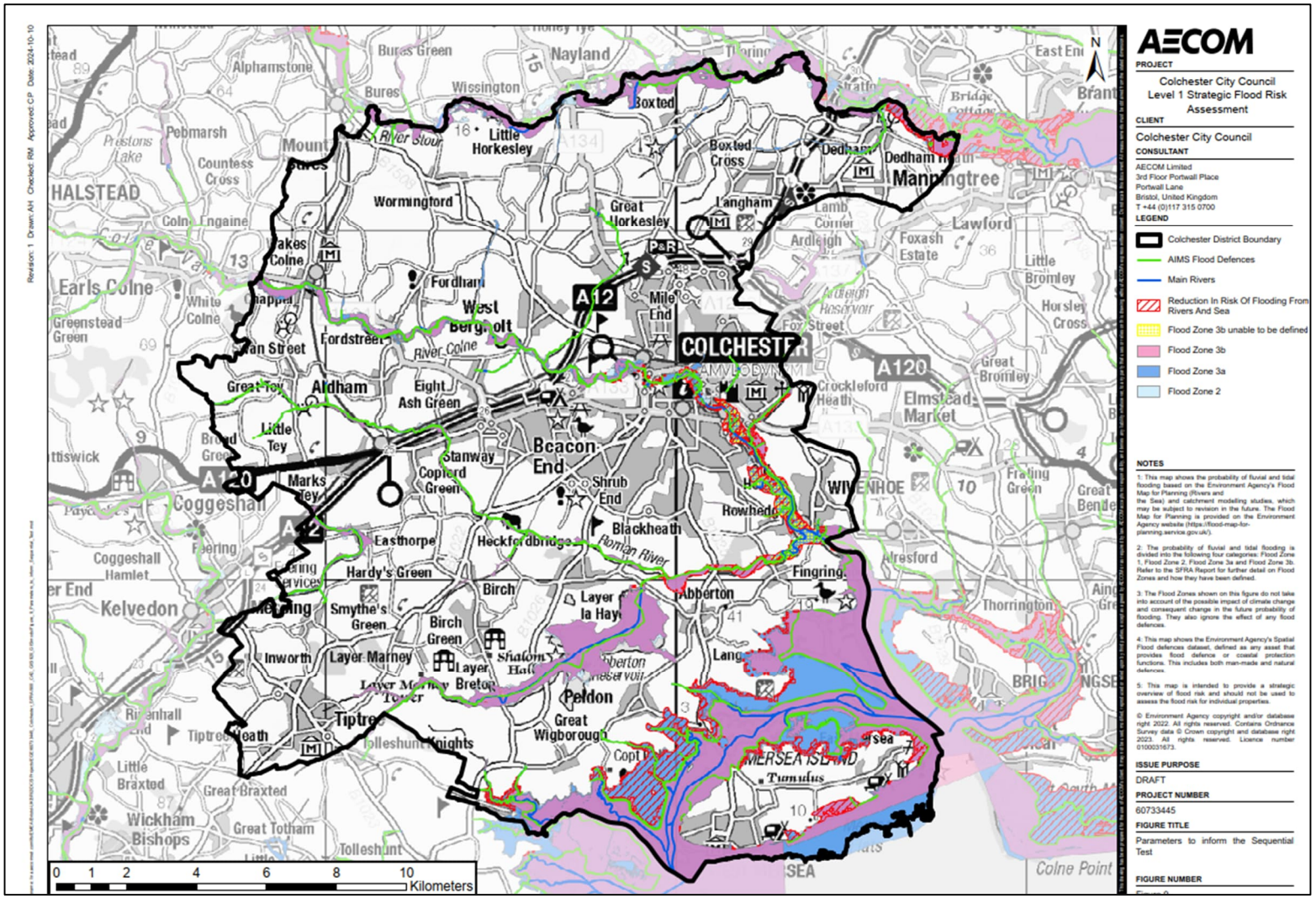
5.7.4. Figure 5-5 shows that the risk of surface water flooding is concentrated around watercourses in the local authority area, most notably the River Colne, Roman River, Layer Brook and the network of watercourses leading to the estuarine channels in the south. The risk of surface water flooding also increases markedly in urbanised areas, with this being most pronounced in the Colchester urban area. Figure 5-5 also displays Critical Drainage Areas (CDAs) [197]and shows that there are 11 CDAs in the CCC area, most of which are concentrated in the Colchester urban area and surrounding areas, and one in Wivenhoe.

5.7.5. There are several flood defences present within the CCC area which are mapped in Figure 5-4. These comprise:

[197] A Critical Drainage Area (CDA) is a discrete geographic area (usually a hydrological catchment), within the SWMP Study Area where multiple or interlinked sources of flood risk cause flooding during a severe rainfall event thereby affecting people, property, or local infrastructure.

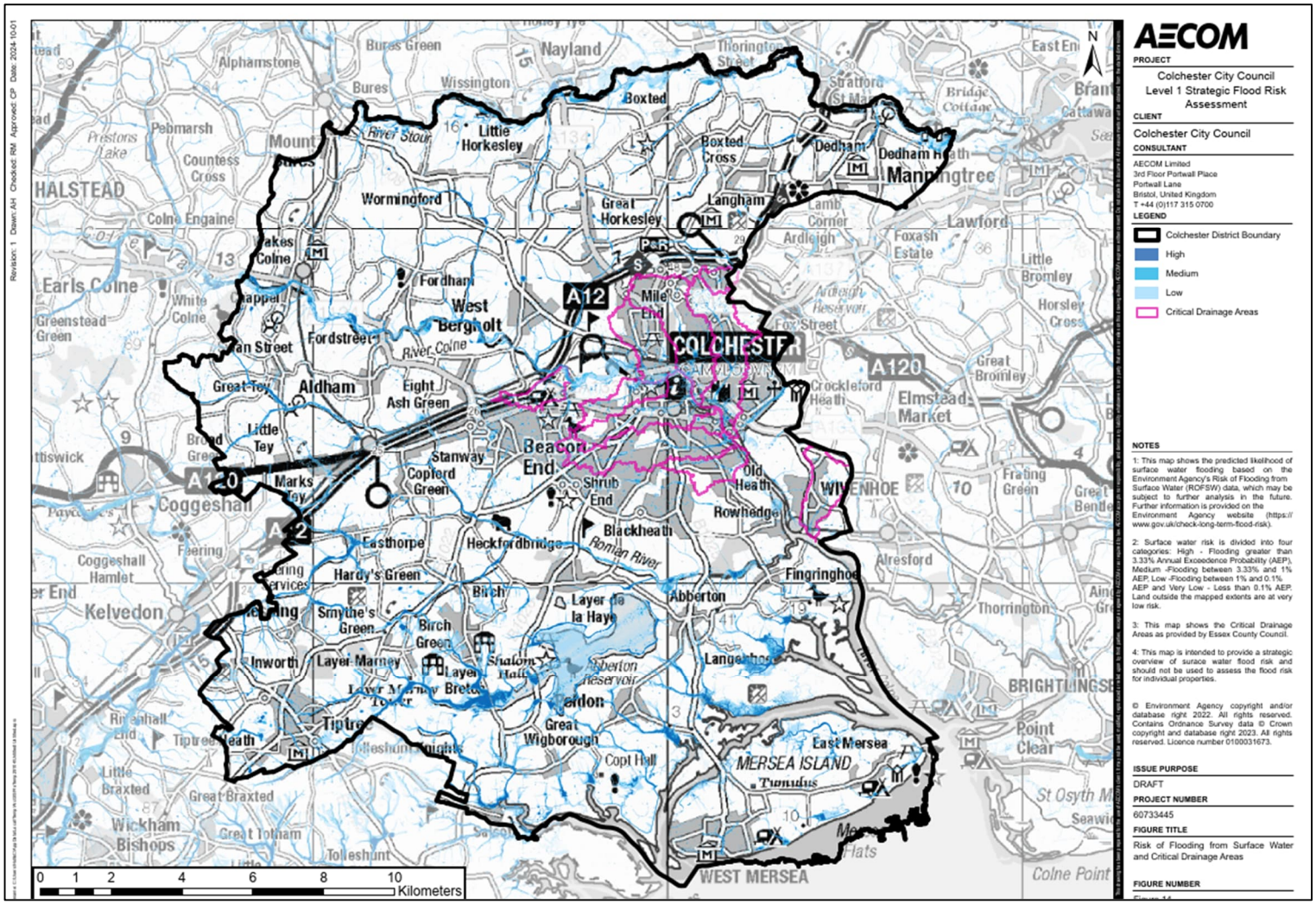
- Embankments around Mersea Island, along the River Colne in some locations and along the Roman River on both banks from Mersea Road until the confluence with the River Colne. These provide a Standard of Protection of between 100% Annual Exceedance Probability (AEP) (1 in 1 year) and 20% AEP (1 in 50 year) events.
- There is an engineered high ground defence located near to St James' Primary School in the city of Colchester to provide protection from an unnamed ditch running adjacent to the school playing field.
- Natural high ground is located along the majority the watercourses, including the key watercourses of the River Colne, River Blackwater and Roman River.
- There is a section of flood wall located along the River Colne near Hythe and North Station Road.
- The Colne Barrier at Wivenhoe protects areas upstream, in particular the Colchester urban area, from flooding caused by tidal surges. This provides a Standard of Protection up to the 0.1% AEP (1 in 1000 year) event.

Figure 5-4 Fluvial Flood Risk Zones, Flood Defences and Areas Benefitting from Flood Defences within the Colchester District



Source: AECOM (2024) Colchester District Council Draft Level 1 Strategic Flood Risk Assessment

Figure 5-5 Risk of Flooding from Surface Water and Critical Drainage Areas within the Colchester District



Source: AECOM (2024) Colchester District Council Draft Level 1 Strategic Flood Risk Assessment

Infrastructure requirements to 2041

5.7.6. Climate change is expected to increase the frequency, extent, and impact of flooding, as reflected in higher peak river flows. Wetter winters and more intense rainfall may increase fluvial and surface water flooding. Rising sea levels at the Colne and Blackwater Estuaries may also increase flood risk. Fluvial flood risk may also be increased due to rising tidal levels which can cause tide locking.

5.7.7. The future risk of flooding within Colchester is influenced by several factors. These include:

- More intense rainfall periods due to climate change.
- Population increases leading to increased hard standing development, increased surface ponding and surface water runoff rates.
- Pressure for new development in areas at high risk of flooding.
- Inadequate maintenance of existing structures and assets.
- Deterioration of structures and features that currently provide protection; and
- Heightening river levels preventing surface water draining from developments.

5.7.8. As part of the emerging CCC Level 1 SFRA (in production in 2024) ECC have confirmed the following planned schemes that relate to ordinary watercourses have either been completed, or are in the pipeline; however, the costs associated with delivering the infrastructure schemes are not currently available:

- Delivery of a capital scheme to increase storage in Distillery Pond and line the outfall from the pond, working in partnership with CCC on delivering a new WaStop valve on the Haven Road outfall;
- As part of the same Haven Road scheme, proposals to deliver automated flood warning signs; and,
- Working to deliver Natural Flood Management (NFM) at Blythe Pond.

5.7.9. The Local Plan Review outlines proposed housing and employment development sites within the district to 2041. There is a forecasted growth of 20,441 dwellings to 2041, with development concentrated within the areas of Marks Tey and Eight Ash Green (to the west of Colchester), Langham and Great Horksley (to the north of Colchester) and within the City of Colchester. This is shown in Figure 2-1, with employment development sites shown in Figure 2-2.

5.7.10. Where employment development sites are proposed (noting that at this stage the emerging development trajectory identifies existing allocations only), some sites intersect slightly with Flood Zones 2 and 3, particularly within the City of Colchester. This is also true of housing sites: there is encroachment of Flood Zones 2 and 3 in some sites located in the City of Colchester.

5.7.11. The Standard of Protection (SoP) offered by the current flood defences will decrease over the Local Plan period to 2041, and beyond, as the impact of climate change increases peak river flows and fluvial and tidal water levels.

5.7.12. Areas to the south-east of Colchester, currently protected by defences, may require improvements to defences in the future to maintain the SoP and account for climate change impacts.

Costs, funding and delivery

5.7.13. To maintain the current level of protection or increase the SoP to 1 in 100 year (the limit of Flood Zone 3) across Colchester, flood defences would require improvements. This would require significant investment which would need to be provided based on a partnership approach. However, in practice, increasing the level of protection by flood defences is likely to be undertaken only where either existing property or development of land requires it and where it does not move flood risk further downstream in the catchment.

5.7.14. The need for additional/improved flood defences will be met through a combination of measures by the relevant risk management authorities, in addition to measures taken by private landowners, depending on the type and ownership of the individual flood defence.

5.7.15. The CCC Local Plan 2017-2033 requires all development to be directed to areas at lowest risk of flooding by applying the Sequential and Exception Tests, in line with national guidance, and also requires all development to incorporate appropriate surface water drainage. The Draft Local Plan follows the same policy approach. This should ensure that all sites are located outside the floodplain, by preference, or that flood defences are improved by developers if required and arrangements are made for their long-term management and maintenance.

5.7.16. The Environment Agency budget for maintenance of flood defences is provided by central government, while the Internal Drainage Boards (IDBs) are mainly funded through charging fees to landowners protected by their assets (Drainage Rates). Flood and Coastal Risk Management (FCRM) Allocation Principles were agreed by the Environment Agency Board on the 7th of October 2020. These include an investment of £5.4bn to better protect properties and infrastructure nationally by 2026 / 27. This will be done through a broad range of resilience actions, alongside protection measures which will provide better protection to over 336,000 properties and reduce flood and coastal erosion risk by 11% nationally.

5.7.17. The Anglian Eastern Regional Flood and Coastal Committee (RFCC) funding[198] includes an indicative programme for capital allocations within the 6-year programme from 2022 / 2023 – 2026 / 2027 for the Anglian Eastern region, which includes Colchester. Online mapping[199] indicates no schemes are located within the Colchester Local Authority area. The last scheme undertaken in Colchester was The Hythe Flood Alleviation Scheme (FAS), completed before 2021.

5.7.18. Under the Flood and Water Management Act 2010, ECC are the LLFA covering Colchester and under the Act, ECC have been given lead responsibility for reducing the risk of flooding from surface water, groundwater and ordinary watercourses and to work closely with other Risk Management Authorities (i.e. Environment Agency, Water Companies, Local Planning Authorities and Essex Highways). Additional responsibilities under the Act include preparing and maintaining a Local Flood Risk Mangement Strategy, maintaining a register of and managing assets that have an impact on flooding, investigating flooding incidents, commissioning flood risk management works, and regulating changes to ordinary watercourses under the Land Drainage Act 1991. LLFAs are also responsible for enforcing watercourse maintenance, ensuring developments manage runoff without increasing flood risks, and responding to major planning applications regarding sustainable drainage systems.

5.7.19. Many organisations, such as the Environment Agency, LLFAs etc, will have contingency funds to respond to flooding, but this may not cover the cost of extensive mitigation measures. Alternative sources of funding may be required, such as an application to Defra for Flood and Coastal Erosion Risk Management Grant in Aid (FCERM GiA) funding, or a Local Levy.

Summary

5.7.20. Key findings relating to flood defence are as follows:

- The primary sources of flood risk in the Colchester local authority area are tidal, fluvial and surface water, associated with the River Colne, River Stour and their tributaries.
- Flood defences are primarily located along the River Colne, as well as the coastal frontage and Mersea Island. These mainly comprise natural high ground, embankments and the Colne Barrier. The condition and level of protection provided by the flood defences is variable and climate change is likely to reduce the effectiveness

of the defences in the long term in the absence of works to maintain the level of protection.

- Areas most likely to be affected by fluvial impacts of climate change are:
  - Southern areas of the local authority area due to the areas' low lying topography; and
  - Areas close to the Colne and Stour Rivers.
- There are currently no flood risk management schemes proposed within Colchester.
- Where housing and employment development sites are proposed within the City of Colchester (noting that at this stage the emerging development trajectory identifies existing employment allocations only), some sites intersect slightly with Flood Zones 2 and 3.
- The Colchester Local Plan 2017-2033 requires all development to be directed to areas at lowest risk of flooding by applying the Sequential Test, in line with national guidance. Where future developments within Flood Zone 2 and 3 are proposed, they may require improvements to flood defences to provide or maintain a 1 in 100 year SoP and to pass the NPPF Exception Test. However, this would need to be considered on a case by case basis and it would need to be demonstrated on a catchment level that flood risk is not increased downstream, through the loss of floodplain storage or floodplain connectivity.
- Proposed development located in areas to the south on lower lying land and settlements in proximity to the Rivers Colne and Stour, together with their tributaries in particular may require improvements to defences to ensure adequate protection for the proposed developments. This may add significant additional expense for developers. Liaison with the Environment Agency will be required to determine any site-specific requirements with regards to Flood Defences.

5.8. Surface water management

Baseline

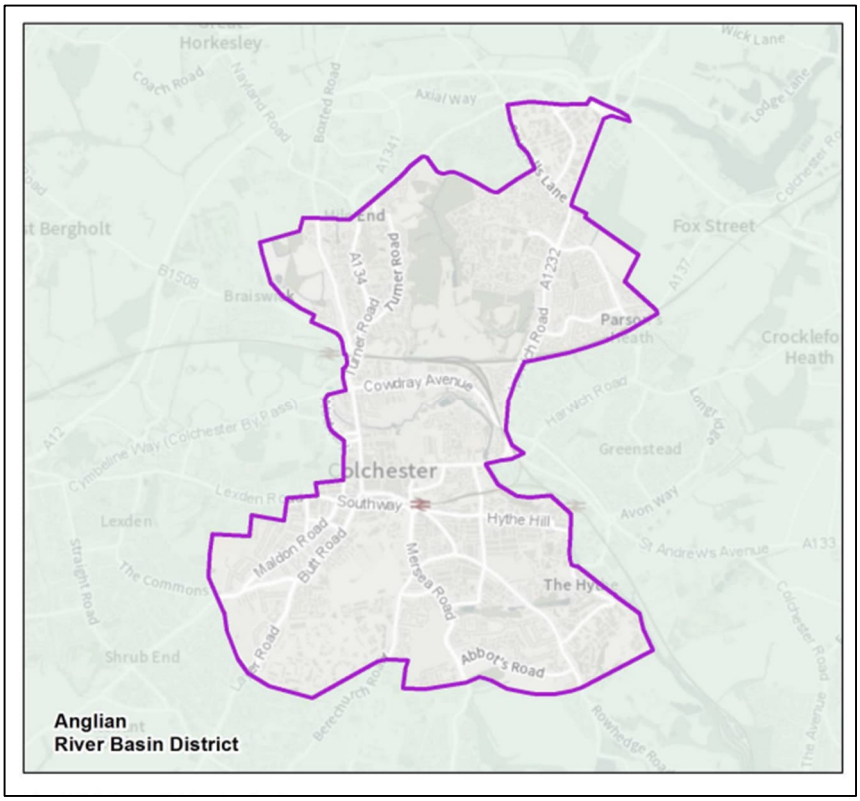
Current provision

5.8.1. Surface water is one of the main sources of flooding across the Colchester and predominantly follows topographical flow paths of existing watercourses and dry valleys and can also pond in low lying areas. In most cases, the risk is confined to valleys, but there are notable prominent runoff routes around properties and roads in urban areas, including within the Colchester urban area, Tiptree and West Mersea. The Environment Agency Risk of Flooding from Surface Water (RoFfSW) mapping (Figure 5-5) shows that several communities in Colchester are at risk of flooding from this source. The Colchester Level 1 SFRA summarises the outputs of Flood Investigation Reports for Marks Tey[200] and Haven Road and Distillery Pond[201] relating to surface water flood events from April 2013and May 2016 respectively. Areas such as Marks Tey and Colchester City are shown to have a higher number of historical flooding records associated from surface water.

5.8.2. Colchester City is ranked fifth within ECC in terms of properties at risk of surface water flooding. Colchester is also recognised nationally as a Flood Risk Area by the Environment Agency[202]. As shown Figure 5-6 , the Flood Risk Area includes the main city centre and parts of north, south and east of the Colchester urban area.

[200] ECC (2013) Flood Investigation Report Marks Tey – Wilson's Lane, Goodmans Lane, Mott's Lane, Coggeshall Road
[201] ECC (2016) Flood Investigation Report Haven Road and Distillery Pond and
[202] Environment Agency (2022) Anglian River Basin District Flood Risk Management Plan 2021-2027: Available at: Anglian River Basin District Flood Risk Management Plan 2021 to 2027 (publishing.service.gov.uk)

Figure 5-6 Location of the Colchester Flood Risk Area



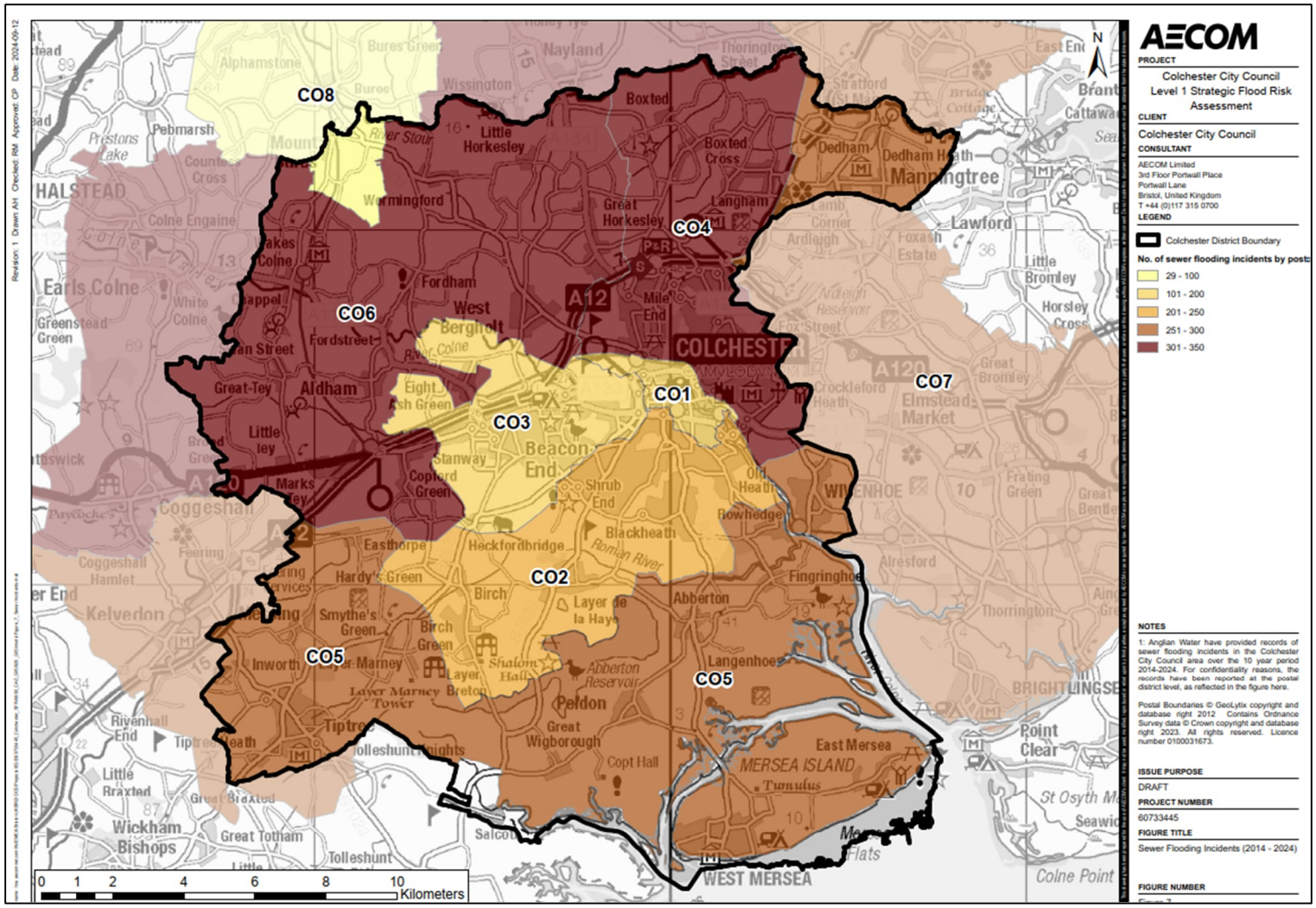
Source: Anglian River Basin District Flood Risk Management Plan (2022)

5.8.3. As part of the Colchester Town Surface Water Management Plan (SWMP)[203] (2013), surface water modelling was undertaken to aid the identification of Critical Drainage Areas (CDA) within the City of Colchester. An update to the SWMP was undertaken in 2018[204] which updated the CDAs and associated action plan. The SWMP indicates Colchester has 11 areas classified as Critical Drainage Areas (CDAs) with a total of approximately 940 residential properties identified as being at risk of surface water flooding during a 1 in 100 year storm, or 1% AEP. This has potential to increase to around 1,630 residential properties should the upper limit of 40% increase in storm intensity be considered to account for future climate change.

5.8.4. Anglian Water's DG5 register[205] shows incidents of public foul, surface water and combined sewer flooding. Figure 5-7 shows this data on a postcode basis which was obtained from the emerging Colchester Level 1 SFRA and highlights areas potentially affected from surface water and sewer flooding as a result of capacity exceedance and discharge from sewers. This information can help identify flooding hotspots, where there is limited sewer capacity, and help inform future schemes and mitigation. At the time of writing, there has been a total of 1,763 recorded incidents since 2014, with the north west and north of Colchester, including the CDAs, and the south and south west of Colchester with the highest total recorded events.

[203] Essex County Council and Colchester Borough Council Colchester Town Surface Water Management Plan (2013): https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-Local-Plan-Colchester-Town-Centre-Surface-Water-Management-Plan-EBC%204.62%20Colchester_Surface%20Water%20Management%20Plan%20Jul%202013.pdf [Accessed September 2024].
[204] Essex County Council Revised CDAs (2018): https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-Local-Plan-Colchester-Surface-Water-Management-Plan---Maps-EBC%204.64%20Surface%20Water%20Management%20Plan%20(Maps).pdf [Accessed January 2025].
[205] The DG5 is a register of locations of recorded historic internal and external sewer flooding events with a Water Company area. Due to data protection requirements the data is not provided at individual property level; rather the register comprises the number of properties within postcode district areas that have experienced flooding either internally or externally within the last 10 years (2014-2024).

Figure 5-7 Anglian Water Sewer Flooding Incidents (2014-2024) for the Colchester District



Source: AECOM (2024) Colchester District Council Level 1 Strategic Flood Risk Assessment

Infrastructure requirements to 2041

5.8.5. Climate change is expected to increase the number and severity of extreme rainfall events in the coming decades. This may result in increased instances of surface water and sewer flooding, creating a need for additional capacity within existing urban drainage systems. Furthermore, urban development increases the area of impermeable surfaces, which if not mitigated, results in an increase in the rate and volume of surface water runoff.

5.8.6. Within the Colchester local authority boundary, no identified flood alleviation schemes involving SuDS have been identified at this stage. Potential actions that could be undertaken to reduce the risk of surface water flooding within each identified CDA are outlined in the Colchester Surface Water Management Plan (SWMP) Action Plan[206].

5.8.7. The City of Colchester Local Plan 2017-2033 states that all major planning applications and development within the Colchester should be accompanied by a surface water drainage strategy to ensure that the need for SuDS has been properly considered as part of the planning application process. Only where there is a significant risk of pollution to the water environment, inappropriate soil conditions and/or engineering difficulties, should alternative methods of drainage be considered.

5.8.8. While no schemes relating to SUDS have been identified within the Project Schedule, it is likely that all the development sites referred to in the Emerging Development Trajectory are of sufficient size to require SuDS provision under the NPPF, though smaller sites may pose feasibility challenges to including provision within the development boundary.

5.8.9. Anglian Water's Drainage and Wastewater Management Plan (DWMP) includes strategies to increase drainage capacity in defined schemes to 2050 through surface water management and upsizing, and in emerging schemes in catchments susceptible to emerging growth. In particular, between 2025-2050, up to £836m will be spent across the Essex Rivers Catchment Partnership area by Anglian Water to manage future risks, including new permits and increases in Water Recycling Centre (WRC) capacity, removing surface water from the network and investment in SuDS.

5.8.10. Across the Essex Rivers Catchment area (within which Colchester sits) Anglian Water expects a population increase of approximately 118,000 by 2050. A number of settlements have been forecast as areas with high growth between 2025-2050. As such, Anglian Water have identified expected investment required to meet the long-term growth at the catchment scale. Although these funds have not been specifically allocated to projects, each water recycling catchment in each area has been examined and a strategy produced. For example, at Copford, Tiptree and Dedham, the long-term strategy indicates a focus on surface water removal and at Salcot, a potential wetland.

Costs, funding and delivery

5.8.11. Anglian Water's DWMP identifies the need for future investment to increase drainage capacity in Essex. Across the Anglian region, over 25 years, a total of £5 billion will be invested in the network across a range of schemes, including increasing drainage capacity through SuDS and upsizing. The DWMP does not identify specific areas for the investment for specific SuDS schemes at this stage. However. across the Essex Rivers Catchment, a total of up to £836m is to be invested to 2050 to increase drainage capacity and WRC capacity, subject to agreement by Ofwat.

5.8.12. All the proposed development sites that come forward under the Local Plan will need to manage surface water run-off in line with national and local policies and guidance to control runoff rates; SuDS required for new developments will need to be solely funded by the developer. All new developments in Colchester urban area falling within Critical Drainage

[206] BMT (n.d.a) Colchester Surface Water Management Plan Action Plan. Available at: Remote Desktop Redirected Printer Doc. Accessed 2/12/2024

Areas (CDAs) will be required to contribute towards the delivery of flood defence solutions within the respective CDAs as specified in the SWMP Action Plan for Colchester.

5.8.13. Any new SuDS systems should be designed in consultation with ECC in their role as LLFA and design quality will be expected to conform with standards encompassed in the relevant BRE, CIRIA standards and ECC's SuDS Design Guide (and as updated) to the satisfaction of the LLFA.

5.8.14. As it currently stands (prior to enactment of Schedule 3 of the Flood and Water Management Act), SuDS may be retained within private ownership or adopted for maintenance by the LLFA, Highways Agency or Anglian Water on a site-by-site basis. The investment requirement cannot be quantified in this IADP, since it will depend on the details of the systems constructed and adoption agreements reached.

5.8.15. SuDS may form part of future schemes to mitigate any increased risk of localised flooding and, in line with the NPPF, it will be expected that SuDS will be designed, built and funded by developers for all major development. SuDS should be designed and developed in consultation with ECC which has the role of LLFA and works closely with other risk management authorities such as the Environment Agency.

5.8.16. More strategic schemes to address surface water flooding problems will be financed by ECC in their role as LLFA, or by the EA.

5.8.17. Developments located in any of the CDAs or Local Flood Risk Zones (LFRZs) and redevelopments of more than one property or area greater than 0.1 hectare should seek betterment to a greenfield runoff rate. New developments in CDAs will be required to provide or contribute towards the provision of flood mitigation options via CIL/S106 contributions to reduce or mitigate the risk of flooding to existing properties located within the CDA and to accommodate the drainage needs of the new developments.

5.8.18. Any future schemes to address surface water flooding problems will be investigated principally by ECC in their role as LLFA, and financing of these schemes will be sought through partnership funding approaches involving one or more potential partners including private developers, Anglian Water and/or the Environment Agency. The extent of investment required will depend on the extent of the flood risk and the solution proposed and cannot be quantified in this IADP.

Summary

5.8.19. Key findings are as follows:

- Surface water is one of the main sources of flooding across the Colchester local authority area. Several communities are at risk of flooding from this source. The areas of Colchester located within the CDAs and within Marks Tey have a high prevalence of reported surface water flooding events in particular.
- Strategic scale SuDS may form part of flood alleviation projects to reduce the impacts and frequency of existing surface water flooding problems. Anglian Water's DWMP includes long-term strategies to increase drainage capacity through surface water management and upsizing, and via emerging schemes in catchments susceptible to emerging growth.
- SuDS for new major development will also be essential to ensure that surface water discharge rates and volumes from growth are kept to a minimum or as close to the pre-development runoff rate as possible, minimising the increase in flood risk downstream, particularly along the River Colne and River Stour. While no schemes relating to SUDS have been identified within the Project Schedule, it is likely that all the development sites referred to in the emerging development trajectory are of sufficient size to require SuDS provision under the NPPF, though smaller sites may pose feasibility challenges to including provision within the development boundary.

- SuDS must be designed and constructed in consultation with ECC in their role as LLFA. The impacts of climate change must be considered in the design of SuDS schemes.
- Funding for SuDS related to growth will be provided by developers, and in some cases where SuDS can form part of a wider solution to manage existing surface water flood risk, these may be part funded by the LLFA, the Environment Agency or water companies on a site by site or project by project basis. Under the current legislative and policy position, SuDS constructed for new development will be maintained by private owners or in some cases, may be adopted by Anglian Water, or ECC. Once Schedule 3 of the Flood and Water Management Act is enacted[207] a SuDS Approval Board (SAB) will adopt SuDS built to the requirements of new national SuDS standards.
- Anglian Water's DWMP identifies significant investment in surface water management to manage WRC treatment and transmission capacity; however, SuDS specific schemes within Colchester are not identified at this stage of planning, and no costs have been allocated to surface water management within the Project Schedule.
- Liaison with the LLFA and EA will be required to determine site-specific requirements prior to SuDS construction and development.

5.9. Waste and resource management

Baseline

Current provision

5.9.1. ECC is both the Waste Disposal Authority (WDA) and Waste Planning Authority (WPA) for Colchester.

5.9.2. As the WPA, ECC is responsible for ensuring sites are allocated for facilities to meet the waste needs of the County. To meet this requirement, ECC and Southend-on-Sea Borough Council adopted a joint Waste Local Plan in July 2017, covering all 12 District, Borough and City Councils within Essex County plus Southend -on-Sea City, with a Plan period of 2017-2032[208].

5.9.3. As a WDA, ECC is responsible for making the necessary arrangements to dispose of household and commercial waste collected by Waste Collection Authorities (WCA), such as CCC. The WDA is also required to make places available for residents to dispose of their household waste. The waste managed by the WCA and WDA is referred to as Local Authority Collected Waste (LACW).

5.9.4. The WDA and the twelve Essex WCAs work collaboratively as the Essex Waste Partnership (EWP). The partnership aims to ensure cost-efficient and sustainable waste management for LACW across Essex. The EWP have adopted the ambitious joint Waste Strategy for Essex (WSfE) which, covers the period 2024-2054 and will be subject to periodic reviews. ECC and partner authorities are now developing appropriate Action Plans focusing on different elements of the strategy with a mix of short, medium, and long-term targets for the provision of waste management services and associated infrastructure to support both waste collection, treatment and disposal and publicly accessible Recycling Centres for Household Waste (RCHWs).

5.9.5. The WSfE includes a number of headline targets, such as:

- To reduce greenhouse gas emissions and contribute to achieving net zero by 2050;
- To halve the amount of residual waste produced per person by 2042;

[207] Enactment was initially expected in 2024, however this has now been delayed due to a change in Government.
[208] Essex County Council, Southend-on-Sea, (2017); Essex and Southend-on-Sea Waste Local Plan.

- To reuse, recycle, or compost 65% of waste by 2035 with an ambition to achieve 70% or more;
- To stop using landfill by 2030;
- To ensure all residents have access to recycling services for food, plastic, paper, card, metal, glass, and garden waste by 2026; and to add plastic film by 2027.

5.9.6. LACW across Essex is managed through a network of Recycling Centres for Household Waste, five municipal waste transfer stations (WTS), and local depots across the area of the Waste Local Plan.

5.9.7. The Ardleigh WTS off the A120 sits just outside the authority boundary to the east of Colchester. The WTS provides a facility to bulk LACW for efficient and effective onward transport by road to waste treatment or disposal facilities. The Ardleigh WTS serves both Colchester City and Tendring District collected waste as well as waste from the recycling centres in the area and has a design capacity of 115,000 tonnes per annum.

5.9.8. ECC also owns and manages two waste recycling centres within Colchester at Shrub End and West Mersea. In addition, residents of Colchester are likely to use ECC recycling centres in the neighbouring districts of Braintree and Tendring.

5.9.9. ECC managed waste management facilities located within Colchester are presented in Figure 5-8.

5.9.10. Since the publication of the previous Infrastructure Delivery Plan, there have been two WTS schemes permitted within Colchester. Neither of these planning permissions limit the source of waste to Local Authority Collected Waste and allow the transfer of non-hazardous commercial waste:

- Daisy House and adjacent land, Haven Road – construction of a new building and operation of a WTS with a capacity of 38,500 tonnes per annum, permitted October 2021[209]. The purpose of the proposed WTS facility is to enable Veolia to manage recyclable and general/residual waste materials generated by commercial occupants in Essex higher up the waste hierarchy.
- Oyster Haven Business Park, Haven Road – change of use of existing commercial building and yard to a WTS and construction of retaining bays with a capacity of 75,000 tonnes per annum, permitted May 2023[210]. This facility is fully operational as of July 2024[211]. The material to be handled on site will consist of non-hazardous inert and mixed waste derived from household, commercial and construction and demolition sources (there is no proportional split of throughput).

5.9.11. In October 2023, ECC announced plans to extend its existing landfill contracts to the end of March 2025[212]. A new medium term (7-14 years) residual waste solution with Indaver confirms the contracted routes for residual waste from April 2025. A long-term residual waste solution will be explored and, depending on the location, may require new waste infrastructure for waste transfer, bulking, haulage, and treatment in Essex. While there are no specific plans for new or expanded waste infrastructure at the moment any requirements will emerge during WSfE action planning and the scoping of future procurement activities and needs assessment. The WDA promotes the protection of new and existing employment land for category E requirements for waste infrastructure including but not limited to community facilities, waste transfer sites, depots and treatment facilities.

5.9.12. Existing issues for waste and resource management for LACW within Colchester, together with the cumulative impact of nearby developments such as TCBGC include:

- The Ardleigh WTS off the A120 occasionally operates at maximum capacity during peak times requiring waste generated in the area to be diverted to other facilities or requiring additional haulage fleet to be laid on to remove waste.

[209] Please refer to Essex County Council planning reference ESS/118/20/COL for further information Accessed July 2024
[210] Please refer to Essex County Council planning reference ESS/26/23/COL for further information Accessed July 2024
[211] Essex County Council service provider engagement, July 2024
[212] https://www.letsrecycle.com/news/essex-extends-residual-contract/ Accessed July 2024

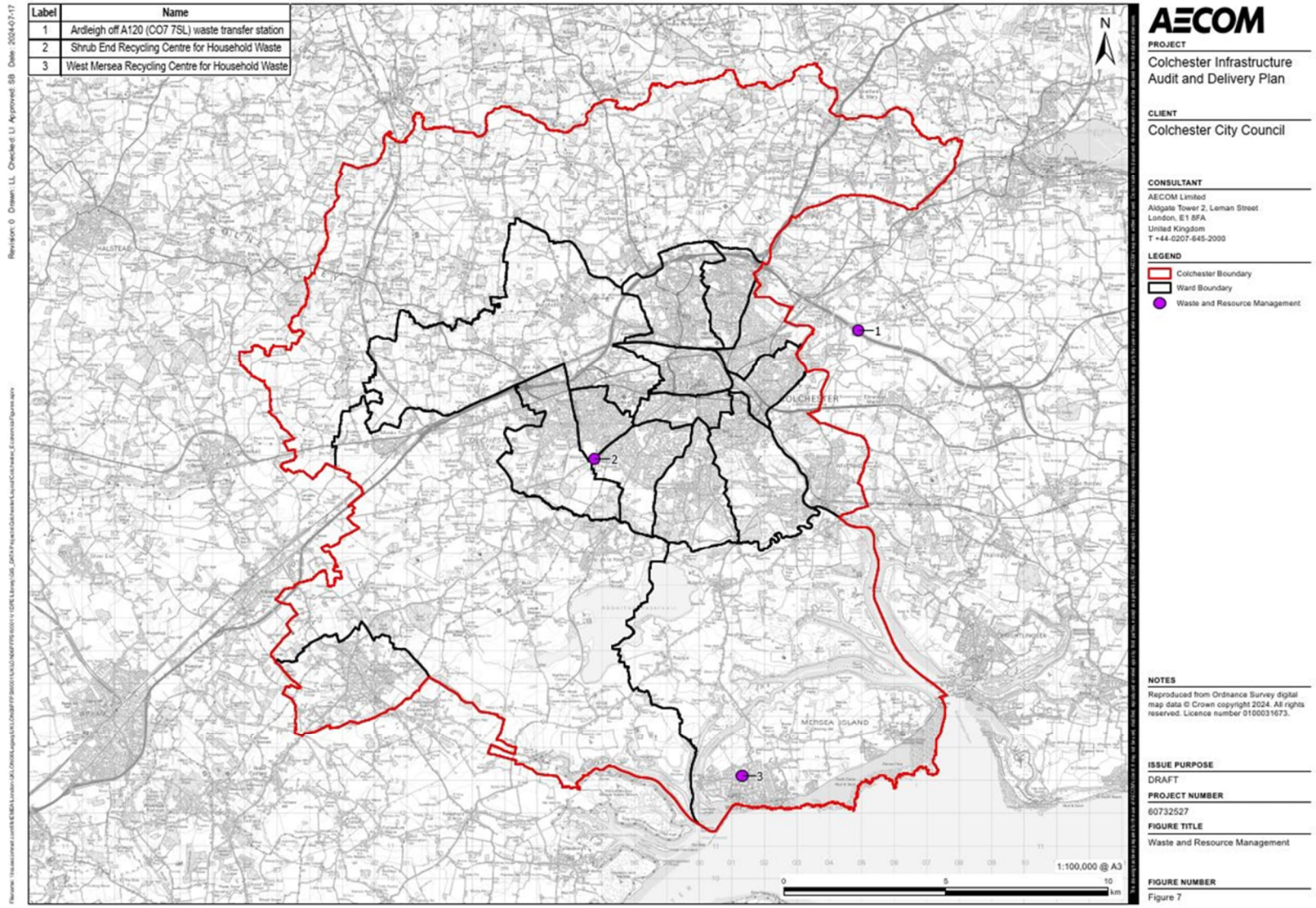
- Regulatory changes are requiring more waste to be segregated and managed through different routes. This is expected to increase over time and will have implications for space requirements, particularly for sorting and segregation operations.
- The Shrub End and West Mersea Waste Recycling Centres are operating above or at full design capacity during peak times. This is particularly noticeable at the weekends.
- The Witham and Clacton Recycling Centres in neighbouring areas are likely to be impacted by the scale of emerging development and are both operating at or above design capacity at peak times.
- Waste flow modelling can be complex due to the impact of external factors such as changing behaviours product design and legislation. This requires significant flexibility and headroom to ensure waste infrastructure can deal with both seasonal and permanent changes waste volumes and composition and individual choice.
- The impact of waste collections services provided by the WCA or other changes such as take back schemes operated by businesses will impact waste in other parts of the system. For example, CCC has recently started a garden waste subscription service and it is likely that this, in turn, has led to a greater demand for free services provided at waste recycling centres[213].

5.9.13. Existing opportunities for waste and resource management of LACW within Colchester include:

- Opportunities to expand and/or reconfigure existing waste management sites to encourage better utilisation of those spaces[214].
- Explore the potential of adapting existing waste recycling centres from single-level to split-level to encourage more efficient waste disposal practices[215].
- Explore the potential for additional site allocations particularly in the area east of Colchester.
- ECC is currently modelling usage and operational capacity across its waste disposal facilities to better understand where capacity improvements are required[216].

[213] Essex County Council service provider engagement, July 2024
[214] Essex County Council service provide engagement, July 2024
[215] Essex County Council service provide engagement, July 2024
[216] Essex County Council service provide engagement, July 2024

Figure 5-8 ECC-managed waste management facilities across Colchester



Infrastructure requirements to 2041

5.9.14. As per the adopted Waste Local Plan[217] and set out in the Project Schedule (Appendix A), the following capital projects will be delivered during the Plan period up to 2032:

- Bellhouse landfill site, Colchester - biological waste management and inert landfill site. The Bellhouse landfill site remains operational, with the extant planning permission[218] requiring the completion of the final landfill operations by 31st December 2026. Restoration must be completed by 31st December 2028. Restoration would require "inert waste and other materials for engineering and restoration of the site". Although the site remains allocated in the WLP (2017), ECC (WPA) have not been made aware of any plans for infilling with inert waste (other than the above permitted activities) or for the provision of a biological waste treatment facility to date.
- Fingringhoe Quarry, Colchester – inert landfill site. Site is currently in restoration; although it remains allocated in the WLP (2017), ECC (WPA) have not been made aware of any plans for infilling with inert waste to date[219].

5.9.15. It is the policy of ECC (the WDA) to use Energy from Waste for treatment of residual waste, and to cease the use of landfill by 2030[220].

5.9.16. As per the adopted Waste Strategy for Essex[221] and set out in the Project Schedule (Appendix A), the services provided by the following recycling centres and associated logistical infrastructure will be need to be enhanced to accommodate additional waste and waste types by 2030:

- Ardleigh WTS off the A120;
- Colchester (Shrub End) Recycling Centre;
- Witham Recycling Centre;
- West Mersea Recycling Centre; and
- Clacton Recycling Centre (which is located within Tendring).

5.9.17. Further sites may be required to meet the future infrastructure needs.

5.9.18. Due to limited opportunities to significantly enhance the RCHW assets in TCBGC to meet growth expectations, a new recycling centre requirement has been identified. This could be co-located with a WCA depot and/or WTS facility (e.g., Tendring Green area).

5.9.19. In addition, the Waste Local Plan[222] designated a number of 'areas of search' which are deemed suitable in principle for waste management development outside of the allocated sites:

- Land off Axial Way, Myland;
- Severalls Industry Park;
- Tollgate, Stanway; and
- Whitehall Road Industrial Estate.

5.9.20. There have been no planning applications to date for waste management facilities within the first three areas of search, and the sites remain as areas of search in the WLP (2017). The

[217] Essex County Council, Southend-on-Sea, (2017); Essex and Southend-on-Sea Waste Local Plan. https://www.essex.gov.uk/sites/default/files/migration_data/files/assets.ctfassets.net/knkzaf64jx5x/5MMZ5nNFmOClpF56igb0Jc/e6f7ab4cba4ed1198c67b87be7b375e7/waste-local-plan-2017-compressed.pdf Accessed July 2024
[218] Please refer to Essex County Council planning reference ESS/03/22/COL for further information
[219] Essex County Council service provider engagement, July 2024
[220] Essex Waste Partnership, (2024); Waste Strategy for Essex 2024-2054.
[221] Essex Waste Partnership, (2024); Waste Strategy for Essex 2024-2054.
[222] Essex County Council, Southend-on-Sea, (2017); Essex and Southend-on-Sea Waste Local Plan. https://www.essex.gov.uk/sites/default/files/migration_data/files/assets.ctfassets.net/knkzaf64jx5x/5MMZ5nNFmOClpF56igb0Jc/e6f7ab4cba4ed1198c67b87be7b375e7/waste-local-plan-2017-compressed.pdf Accessed July 2024

aforementioned Oyster Haven and Daisy House applications were within the Whitehall Road Industrial Estate Area of Search[223].

5.9.21. The Waste Strategy for Essex 2024-2054[224] sets out a number of priorities which have implications for capital assets, which include:

- Encouraging the growth of green businesses to find innovative solutions to deal with waste;
- Designing waste services that increase closed-loop recycling;
- Supporting businesses and communities to deliver local reuse and repair services;
- Supporting activities that promote repair and sharing of pre-loved items;
- Developing reuse and repair services at recycling centres;
- Making it easier for residents to recycle different materials; and
- Providing services that collect high quality material for recycling.

5.9.22. Demand for future waste and resource management facilities and services is impacted by a number of factors including waste tonnage, housing growth and waste composition, as well as the waste regulatory framework. These factors are continually reviewed by ECC's internal monitoring team to provide an understanding of likely impacts on infrastructure need. The County Council's growth model assumptions are based on:

- The latest ONS sub-national annual population projections by local authority area;
- Housing growth by local authority area obtained via Local Development Plans;
- Waste composition analysis by Essex local authority area;
- Historic waste tonnage arisings by Essex local authority;
- Local service changes; and
- Impact assessment reviews of regulatory changes.

5.9.23. It is also well-recognised that waste tonnage and therefore demands on waste management facilities and services is impacted by wider macro-economic cycles, as during periods of economic downturn consumers typically purchase less goods, thus generating less waste.

5.9.24. ECC estimate average household waste tonnages typically range from 900 to 1,200kg per household per annum. In 2023, ECC estimate that average household waste produced was at the lower end of the scale at 920kg per household, with Colchester figures being considerably lower than the County-wide average figure at approximately 870kg. ECC anticipate that waste generation per household will likely increase over the next five-to-six years as the economy improves. However regulatory changes will lead to the need to increase segregation of waste and recycling with an impact on logistic space. Regulatory changes may lead to less waste being collected by local councils and more going via alternate routes such as mandated take-back schemes operated by businesses[225].

When establishing the waste management requirements for growth, ECC refer to Section 51 of the Environmental Protection Act 1990 (and associated legislation and regulation). As per the Developer's Guide to Infrastructure Contributions[226], ECC then take a case by case approach to determining the impact of proposed development on waste and resource infrastructure.

Costs, funding, and delivery

5.9.25. Costs are not known for the eight capital projects identified above and set out in the Project Schedule (noting that the six recycling centre / logistical infrastructure projects set out within

[223] Essex County Council service provider engagement, July 2024
[224] Essex Waste Partnership, (2024); Waste Strategy for Essex 2024-2054.
[225] Essex County Council service provider engagement, July 2024
[226] Essex County Council, (2025); Essex County Council Developers' Guide to Infrastructure Contributions.

the Waste Strategy for Essex are ECC / local authority projects, while the two landfill projects are not).

5.9.26. Waste and resource management infrastructure is funded through a variety of means, with the main source being the council taxpayer. In 2024/25, ECC states that £94 million of public funds will be spent on waste reduction and recycling[227]. In 2022/23, £10,434 of S106 contributions were allocated to waste and recycling collection infrastructure[228]. There were no funds allocated to waste and recycling disposal infrastructure over the same period.

5.9.27. Delivery responsibility for the two landfill projects identified above sits with private delivery partners. Whilst ECC in its role as the WPA can allocate land within Essex for the provision of landfill capacity, this is done with landowner support and the expectation that the private sector will deliver the facility itself. The waste transfer station and recycling centre projects will be delivered by ECC. Depots and other waste collection infrastructure will be delivered by CCC in its capacity as the Waste Collection Authority.

Summary

5.9.28. ECC is both the Waste Disposal Authority (WDA) and Waste Planning Authority (WPA) for Colchester. Household and commercial waste is collected by the Waste Collection Authorities (WCA), such as CCC.

5.9.29. Waste management facilities are currently operating at or near capacity throughout Colchester. ECC is currently exploring options for site expansion and/or reconfiguration at its waste transfer station (Ardleigh off the A120) and its waste recycling centres (Shrub End, West Mersea, Witham and Clacton). The adopted Waste Local Plan (2017-2032) has allocated two sites in Colchester (Bellhouse and Fingringhoe) for waste infrastructure and has earmarked potential 'areas of search' where waste infrastructure may be suitable in principle.

5.9.30. Costs are not known for the eight waste projects identified in the Project Schedule. Requirements for LACW waste and resource management infrastructure is funded through the council taxpayer, and ECC may also seek developer contributions on a case by case basis. Delivery responsibility for projects identified above sits with CCC and ECC alongside private delivery partners.

5.9.31. ECC notes that both regulatory and macro-economic changes and changing individuals' behaviours may have implications for waste management infrastructure demands over the Plan period. ECC anticipate that waste generation per household will likely increase over the next five-to-six years as the economy improves, however regulatory changes may lead to less waste being collected by local councils and more going via alternate routes such as mandated take-back schemes operated by businesses.

[227] https://www.essex.gov.uk/running-council/spending-and-council-tax/what-council-tax-pays. Accessed July 2024
[228] https://cbccrmdata.blob.core.windows.net/noteattachment/CBC-null-Colchester-City-Council-Infrastructure-Funding-Statement-2022/23-Colchester%20City%20Council%20Infrastructure%20Funding%20Statement%202022-23.pdf Accessed July 2024

6. Key findings

6.1. Introduction

This section reviews the Project Schedule in order to draw together the key findings of the infrastructure assessment. It goes on to consider the mechanisms for delivering and funding the infrastructure required to support the Local Plan 2041, and to set out next steps for CCC.

6.2. Summary of Infrastructure Assessment

6.2.1. The IADP has identified infrastructure projects which will be required over the new Local Plan period to meet the needs arising from planned growth. These projects are listed in the Project Schedule (Appendix A). A summary analysis of the Project Schedule is presented in Table 6-1 below.

6.2.2. 230 infrastructure projects have been identified. Some line items in the Project Schedule relate to the modelled estimates of demand and costs for social infrastructure, rather than specific projects.

6.2.3. The majority of the line items (128) identified relate to transport. 76 relate to social and green infrastructure, and 26 relate to hard infrastructure.

6.2.4. Total costs of £1,318 million and funding of £506 million have been identified. This implies a funding gap of £811 million. 168 of the 230 line entries in the Project Schedule have costs against them[229].

6.2.5. Transport projects account for 40% of the costs identified and 46% of the funding gap. Social and green infrastructure projects account for 35% of the costs identified within the IADP and 54% of the funding gap. Hard infrastructure accounts for 25% of the costs identified and 0% of the funding gap[230].

6.2.6. While delivery dates for many projects are yet to be confirmed, it is possible to allocate a broad time period or phase to most line items in the Project Schedule, in line with the phased breakdown of the development trajectory set out in chapter 2:

- 46 projects are likely to come forward during the first five year phase (2025/25 to 2029/30), and another 12 projects during either phase 1 or phase 2 (2030/31 to 2035/36);
- 48 projects are likely to come forward during phase 2 (2030/31 to 2035/36), and four projects during either phase 2 or phase 3 (2036/37 to 2041/42); and
- 55 projects are likely to come forward during phase 3 (2036/37 to 2041/42).

6.2.7. The line items with the highest cost in the Project Schedule (excluding schemes which are located entirely or partly outside of Colchester albeit they will cater partly for Colchester's need) are:

- Electricity substation upgrades in 15 locations to meet new demand (£251.8 million, assumed to be funded via the utility company and developer charges)
- A new strategic link road between the A120 and A133 (£86.0 million, assumed to be funded);

[229] For six schemes (one SRN scheme and five potable water schemes), costs have not been included in the total because the schemes are located partly outside of Colchester, or are regional / national schemes with no detail currently available on potential local investment.

[230] It is important to note that the 0% funding gap for hard infrastructure does not imply that all funding requirement to meet needs to 2041 has been secured. Rather, it reflects a reasonable assumption that, as set out in the individual topic chapters, funding for planned growth will be identified by the regulated utility companies when they formulate their five-year investment plans for the relevant period rather than needing to be met by developer contributions or ad hoc income streams.

- Primary school provision to 2041 (high level benchmark estimate of demand and cost) (£70.4 million, assumed to be unfunded);
- Secondary school provision to 2041 (high level benchmark estimate of demand and cost) (£61.1 million, assumed to be unfunded);
- Adult social services to 2041 (high level benchmark estimate of demand and cost) (£56.8 million, assumed to be unfunded);
- Healthcare facilities to deliver primary, acute and mental healthcare services (£52.2 million, assumed to be unfunded)
- Rollout of Ultrafast Broadband and 5G Colchester (£48 million, assumed to be funded);
- Children's services (high level benchmark estimate of demand and cost) (£45.1 million, assumed to be unfunded); and
- RTS extension City Centre to Marks Tey (£37,6 million, unfunded).

Table 6-1 Summary Analysis of the Project Schedule

Infrastructure Category	Line Entries (no.)	Identified Costs (£)	Identified Funding (£)	Funding Gap (£)
Transport				
Highways	28	£188,083,500	£135,900,000	£52,183,500
Rail	0			
Bus	18	£67,049,500	£15,000	£67,034,500
Active Travel	82	£265,861,038	£10,978,935	£254,882,103
Total	**128**	***£520,994,038***	***£146,893,935***	***£374,100,103***
Social and Green Infrastructure				
Primary Education	10	£73,018,231		£73,018,231
Early years and childcare	1	£29,207,292		£29,207,292
Secondary Education	4	£62,609,994		£62,609,994
Special Educational Needs	1	£18,632,736		£18,632,736
Further Education	1	£12,874,056		£12,874,056
Higher Education	3	£1,300,000	£1,300,000	
Adult learning	4	£11,100,000		£11,100,000
Primary, acute and mental healthcare	18	£52,299,310		£52,299,310
Adult social services	1	£56,817,660		£56,817,660
Children's services	1	£45,135,560		£45,135,560
Indoor and outdoor sports	3	£13,784,618		£13,784,618
Pitches	3	£5,664,108		£5,664,108
Open Spaces	4	£19,377,242		£19,377,242
Play space	2	£1,428,297		£1,412,411
Green infrastructure	2			
Youth services	1	£1,300,000	£1,300,000	
Community centres	2	£18,684,360		£18,684,360
Libraries	3	£4,200,360		£4,200,360
Cultural facilities	9	£26,200,000	£26,200,000	
Police	1	£5,484,944		£5,484,944
Ambulances	1	£4,103,800		£4,103,800
Fire and Rescue	1	£2,931,250		£2,931,250
Total	***76***	***£466,153,819***	***£28,800,000***	***£437,337,933***

Hard Infrastructure				
Energy	1	£251,809,250	£251,809,250	
Potable water	7	£10,568,606	£10,568,606	
Wastewater	9	£20,451,359	£20,451,359	
Digital	1	£48,000,000	£48,000,000	
Waste & resource management	8			
Flood Defences	0			
Surface Water Management	0			
Total	***26***	***£330,829,215***	***£330,829,215***	***£0***
Total: all infrastructure	**230**	**£1,317,977,072**	**£506,523,150**	**£811,438,036**

Source: AECOM

6.3. Delivery and funding

6.3.1. Table 6.2 below summarises the key infrastructure delivery agencies and funding sources relevant to Colchester's new Local Plan to 2041, by infrastructure type.

Table 6-2 Infrastructure Delivery Agencies and Funding Sources in Colchester

Infrastructure type	Delivery agencies	Funding sources for capital investment
Education		
Primary education	ECC, central government (DfE), developers, academy schools	Developers, DfE
Early years education and childcare	ECC, Private, Voluntary, and Independent (PVI) sector	Developers, PVI sector
Secondary education	ECC, central government (DfE), developers, academy schools	Developers, DfE
Further education	ECC	Developers, central and local government, FE institutions
Special Education Needs and Disability (SEND)	ECC, Essex Schools Forum	Developers, DfE
Higher education	University of Essex	Developers, tuition fees, Levelling Up Fund, commercial services income
Adult education	ECC	DfE
Sports and community facilities		
Indoor and outdoor sports and leisure facilities	CCC, Sports England, private sector, governing bodies	Developers, governing bodies
Playing pitches	CCC, Sports England, private sector	Developers
Open spaces	CCC	Developers, public sector, third sector
Green infrastructure	Environment Agency, Natural England, [look for local trusts]	Developers, charities, central government, Natural England, private sector, partnership between councils, EU
Playspace	CCC, parish councils	CCC, parish councils
Youth facilities	ECC, PVI sector, central government, parish councils, health bodies, schools and colleges	Developers, public sector, third sector, national funds
Community facilities	ECC	Developers, charities
Cultural and civic facilities	ECC	Developers, central government (e.g Town Deal fund), charities (e.g. NLHF), cultural organisations
Emergency Services		
Police	Essex Police	Developers, central government, local taxation

Infrastructure type	Delivery agencies	Funding sources for capital investment
Ambulance	East of England Ambulance Service	Developer, NHS England, Department for Health and Social Care (DHSC)
Fire and rescue	Essex County Fire & Rescue Service	Developers, central government, local taxation
Healthcare		
Primary care (GPs)	SNEE ICB, SNEE ICS, North East Essex Health & Wellbeing Alliance	Central government (capital funding), NHS, developers
Acute care services	ESNEFT, SNEE ICB, North East Essex Community Services, Hertfordshire Partnership University NHS Foundation Trust,	Central government (capital funding), ICB, NHS, developers
Mental health services	EPUT	Central government (public dividend capital), DHSC
Adult social care	ECC, private sector providers	ECC, developers, central government.
Specialist and supported facilities for children	ECC, ECFWS, private sector	ECC, developer, SNEE ICB, central government
Transport		
Active travel	ECC, LHA	Developers, ECC, CCC
Bus	CCC, bus service providers (First Essex and Arriva)	Developers, commercial operators, ECC, central government
Rail	Network Rail, train service operators	Network Rail, central government
Roads	National Highways, ECC	National Highways, central government
Electric Vehicle (EV) infrastructure	ECC, Transport East, local transport providers, energy suppliers, National Highways, DfT.	ECC, central government, developers
Utilities, waste, and water		
Electricity	CCC, UK Power Networks (East)	UK Power Networks (East), Developers
Gas	National Grid, Cadent Gas Limited	Cadent Gas Limited
Renewable and low carbon	CCC, private companies	CCC, private companies
Telecommunications and digital	Colchester Fibre, utility providers (as Sky, Virgin Media and BT Openreach, OpenInfra, Lightspeed and Gigaclear)	Public-private partnerships
Potable water	Anglian Water, Affinity Water	Anglian Water, Affinity Water, developers

Infrastructure type	Delivery agencies	Funding sources for capital investment
Wastewater	Anglian Water	Anglian Water, developers
Flood defence	Environment Agency, Natural England, Internal Drainage Board, ECC	Central government (Defra), drainage rates, Anglian Eastern Regional Flood and Coastal Committee (RFCC) funding
Surface water management	Anglian Water, ECC, Environment Agency, private sector	Anglian Water, developers
Waste and resource management	ECC, private sector	ECC

Delivery

6.3.2. This IADP demonstrates that work is well underway by CCC, service providers and partners to identity and deliver the future infrastructure required for development over the Plan period.

6.3.3. As noted above, the majority of the infrastructure projects for which a broad delivery date has been identified are set to come forward within the next 10 years. It is to be expected that more information is available on near-term projects; most service providers operate to a three to five year programming cycle, and infrastructure provision associated with major allocations will be confirmed as these development projects move through the planning process. However, it will be important for CCC and partners to continue their work to develop and firm up the infrastructure projects required to deliver growth.

6.3.4. The IADP has formed a basis for conversations about how future growth in Colchester can be delivered. Going forward, as a comprehensive assessment of infrastructure and projects needed to support growth, the IADP can provide a tool for future partnership working and co-ordination in the planning and delivery of services.

6.3.5. CCC has engaged with neighbouring Local Planning Authorities (LPAs) as part of the process for formulating the new Local Plan to 2041. Cross-boundary strategic matters of particular importance relate to housing need and provision and infrastructure. CCC is also engaged with sub-regional partners through the North Essex Economic Board (NEEB). NEEB is made up of Braintree, Maldon, Tendring, Uttlesford and Epping Forest District Councils, Colchester and Chelmsford City Councils, and Essex County Council. The IADP may present opportunities to feed into emerging sub-regional and regional proposals.

6.3.6. In December 2024, the English Develotion White Paper was published which sets out the governments ambition to reform local government structures to widen devolution across England[231]. Essex County Council, Southend City Council and Thurrock Council were accepted onto the government's Devolution Priority Programme in February 2025. This is likely to result in the creation of a Strategic Authority for Greater Essex, which will initially take the form of a combined county authority[232]. It has been proposed that Colchester, Braintree, and Tendring councils could form a North East Essex unitary authority by 2028 as this geography would meet the government creteria set out in the Devolution White Paper on population size[233]. Moreover, this geography reflects the functional economic market area and the councils' strong track record of working together. However, this proposal is at early stages and is reliant on local government reorganistion going ahead.

Mainstream Funding Sources

6.3.7. Table 6-2 above shows key infrastructure funding sources and delivery agencies relevant to Colchester's new Local Plan, by infrastructure type. Most infrastructure receives all or a major part of their funding from national government, whether that comes through ECC, CCC or via a central government agency. Funding also comes from the charitable sector and the private sector, in the form of private equity and financial or in-kind contributions from developers.

Developer Contributions

6.3.8. The town planning process provides the means for developers to contribute to the cost of infrastructure necessary to support new development. Developer contributions can take various forms including planning conditions, S106 agreements between local authorities and

[231] Ministry of Housing, Communities & Local Government, (2024); Policy Paper: English Devolution White Paper.
[232] Essex County Council (2025); Devolution and Local Government Reorganisation. Available at: https://www.essex.gov.uk/news/2025/essex-councils-accepted-devolution-priority-programme
[233] Colchester City Council, (2025); Devolution Joint Statement. Available at: https://www.colchester.gov.uk/info/cbc-article/?id=KA-04870.

developers, Section 278 agreements which cover contributions to highways, and the Community Infrastructure Levy (CIL).

6.3.9. There is potential for many items on Colchester's IADP Project Schedule to be funded by developers. Charges on development and how they are levied will be determined in due course, in line with CCC and ECC policy on developer contributions. Current CCC policy states that developer contributions will be secured under S106 agreements and/or through a CIL as appropriate. However, CIL will complement and not duplicate planning obligations[234].

6.3.10. S106 contributions will be determined on a site by site basis, and must be:

- Necessary to make the development acceptable in planning terms;
- Directly related to the development; and
- Fairly and reasonably related in scale and kind to the development.

6.3.11. In 2023/24 CCC reports that[235]:

- The total amount of money to be provided under any planning obligations which were entered into during 2023/24 was £4.43m;
- The total amount of money under any planning obligations which was received during 2023/24 was £2.95m.
- The total amount of money under any planning obligations which was received before 2023/24 which has not yet been allocated by the authority was £8.13m
- A total of £1.63m was spent, including £585,000 for leisure/open space, £531,000 for transport & sustainability, and £206,000 for the Essex Coast Recreational Disturbance Avoidance Mitigation Strategy (RAMs).
- A total of 222 affordable housing units were delivered via S106 agreements in 2023/24.

6.3.12. The income associated with S106 Agreements collected in the 2023/24 financial year is shown in Table 6-3.

Table 6-3 S106 Income 2023/24

Monetary contributions through planning obligations in 2023/24	£
Total money received	£2,945,096.61
Total money spent	£1,632,009.38
Total money retained	£2,253,258.14

Source: Colchester City Council, (2024); Infrastructure Funding Statement 2022/2023.

Alternative Funding Sources

6.3.13. In addition to mainstream funding sources and developer contributions described above, other funding sources potentially avalaible to fund infrastructure in Colchester are set out below:

- One-off public sector grants - Recent examples of capital grants available via a competitive bid process include the Neighbourhood Planning Grant (MHCLG), the Towns Fund, the Long Term Plan for Towns, High Street Rental Auction Fund (MHCLG), Brownfield, Infrastructure and Land Fund (Homes England), Future High Streets Fund, Safer Streets Fund, Getting Building Fund (GBF), and the Active Travel Fund (DfT).
- New homes bonus - The New Homes Bonus is a grant paid by central government to local councils to reflect and incentivise housing growth in their areas. It is based on central government match funding the council tax raised for new homes and properties

[234] Colchester City Council, (2022); Colchester City Local Plan 2017-2033 Section 2.
[235] Colchester City Council, (2024); Infrastructure Funding Statement 2023/2024.

brought back into use, with an additional amount for affordable homes, for the following four years. However, it has been proposed that 2025-26 will be the final year the New Homes Bonus is paid in its current format. The government will consult on detailed proposals for arrangements beyond 2025-26 in the first half of 2025[236].

- UK Shared Prosperity Fund - While a member of the EU, the UK received around £2bn in structural funding, and could also access the European Investment Bank[237]. Arrangements for national successor funding were confirmed in April 2022 when the Government launched the UKSPF which will run to March 2025[238]. This is a £2.6bn fund for local investment with all areas of the UK receiving an allocation via a funding formula rather than a competition.
- Business rates retention – Since reforms in 2013/14, local authorities have kept 50% of the business rates revenues raised locally (the granted received from central government has been adjusted to compensate those who generate less locally-raised revenue). There may be scope for CCC to agree with central government to retain a greater proportion of business rates in order to raise funding for infrastructure.
- Stamp Duty Land Tax (SDLT) supplement - SDLT must be paid if a person buys a property or land over a certain price in England. This includes when a person buys a freehold property, buys a new or existing leasehold or buys a property through a shared ownership scheme. An SDLT supplement of 3% applies where a buyer purchases a second property for £40,000 or more, such as a buy-to-let property or a holiday home. SDLT goes to HM Revenue and Customs i.e. central government, but a supplement could be charged and passed to a local authority to fund local infrastructure.
- Parking revenue - In 2022-23, local authorities in England generated £962m in parking charges[239]. Income from parking charges is generally spent on running parking services and any surplus is spent on essential transport projects such as road repairs, reducing congestion, tackling poor air quality and supporting local bus services.
- Public Works Loan Board (PWLB) - Councils can obtain loans at low rates from the PWLB under prudential principles. However, the availability of revenue funding to repay the loan and the political appetite for borrowing are factors affecting the attractiveness of this option.
- Tourist tax – Tourist taxes on accommodation such as hotels have been suggested in many areas as a new source of funding for local authorities. At present, in England, neither the central government nor local councils have the power to introduce a tourist tax. However, Manchester and Liverpool city councils, among others, have introduced a form of tourism levy via tourism-based Business Improvement Districts (BIDs). In Manchester and Liverpool, the BID levy is payable by hotels and serviced apartments with a rateable value of £75,000 or more. It is known as the “City Visitor Charge” and participating businesses are encouraged to itemise it on guests’ bills.
- Clean air zone - Clean air zones and low emission zones are specified areas in the UK where vehicles are required to meet minimum emission standards. Driving a vehicle that exceeds the minimum emission criteria can incur a charge payable to the local authority. Examples include the Ultra Low Emission Zone (ULEZ) in London which has been in place since 2019. Revenue from ULEZ helps Transport for London to fund expansion and maintenance of the rest of the transport network.
- Third-party equity investment - where there are potential commercial returns for funders. This includes institutional investors / sovereign wealth funds and pension funds who are attracted to the UK infrastructure market as a place to invest.
- Direct delivery – some local authorities have purchased land for development, progressed design and planning in order to increase land value, and then raised

[236] Ministry of Housing, Communities & Local Government, (2024); Local authority funding reform: objectives and principles.
[237] House of Commons Library, (2021); The UK Shared Prosperity Fund.
[238] House of Commons Library, (2021); The UK Shared Prosperity Fund.
[239] Local Gov (2023). Council’s parking revenue approaches £1bn. Available at: https://www.localgov.co.uk/Councils-parking-revenue-approaches-1bn/58148

funding from its disposal (this could be in the form of land receipts and/or a share of development profit or overage).

6.4. Next steps

6.4.1. This IADP forms part of the evidence base on infrastructure provision for the new Local Plan. Beyond adoption of the Local Plan to 2041, the IADP can be updated as more detailed information comes forward. It will therefore provide a valuable tool to ensure that the infrastructure required to support growth in Colchester is effectively planned, funded and delivered. In particular, the IADP schedule provides a comprehensive project database which can be further developed as project information emerges, providing a basis for future collaboration between stakeholders and a mechanism to appropriately align the work of service providers and other partner organisations.

6.4.2. The review of funding sources presented above demonstrates that the funding landscape is dynamic. There are risks around some well-established funding sources while new alternative funding opportunities are emerging at the same time. As a next step, CCC and partners may need to prioritise projects (or clusters or portfolios of projects) and to explore further which specific combination of funding sources is likely to be most appropriate in each instance. Through continued joint-working, CCC and partners will be in a strong position to respond promptly and effectively to infrastructure funding opportunities, and to attract investment.

Appendix A Project Schedule