

Thurrock Infrastructure Delivery Plan

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ARUP

Infrastructure Delivery Plan

Developer Forum

- Introduction
 - Role of the IDP
 - Scope - infrastructure considered
 - Programme
- Overview of infrastructure constraints/issues
- Forum feedback
- Next steps

What is the IDP?

The purpose of the Infrastructure Delivery Plan

The purpose of the IDP is to set out the social and physical infrastructure that will be required to deliver the planned level of housing and employment growth over the plan period.

This will form part of the evidence base for the Local Plan.

In 2019 Arup produced an Infrastructure Baseline Assessment, to understand existing provision and any existing capacity issues. The IBA covered:

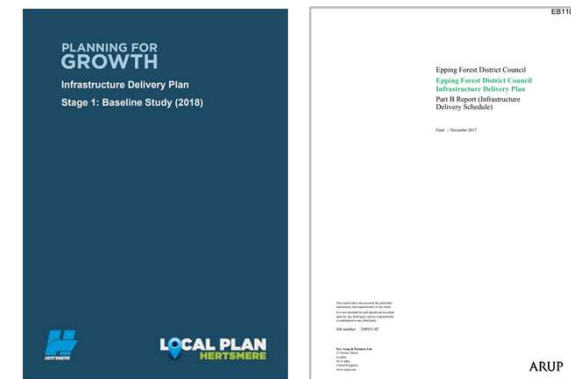
- Strategic issues in relation to the planning and delivery of infrastructure;
- Key areas of shortfalls in provision (or, vice versa, areas with capacity); and
- Planned projects to meet future demand.



Role of an IDP

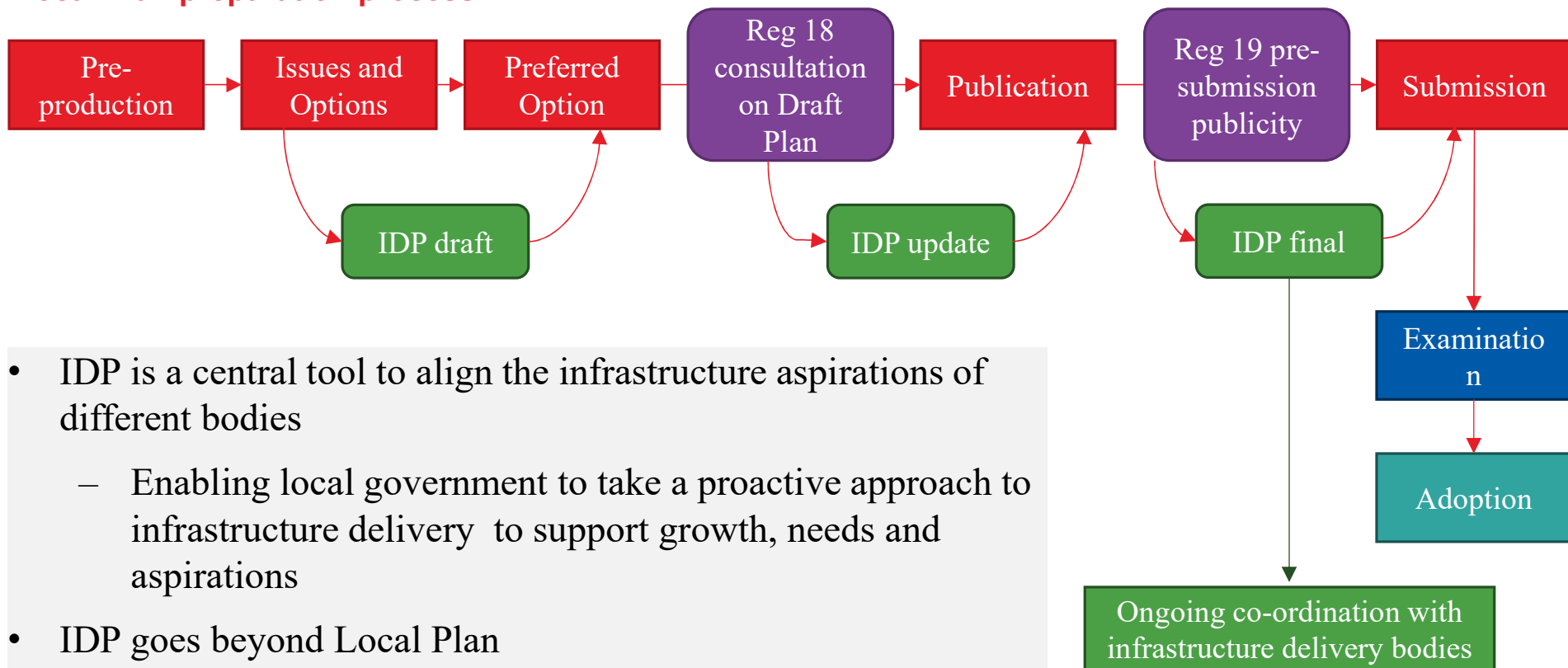
Role of an Infrastructure Delivery Plan (IDP)

- Importance part of the Local Plan evidence base – but should also be a living document that becomes an active tool for infrastructure planning and delivery
- IDPs:
 - Enable local government to take a proactive approach to infrastructure delivery to support growth, needs and aspirations
 - Align the infrastructure aspirations and plans of different organisations
 - Ensures that existing deficits in infrastructure provision are understood as well as identifying infrastructure needed to support future development
 - Help to understand when infrastructure is needed, how much it will cost how it will be funded and who will deliver it



Relationship of the IDP to Local Plan

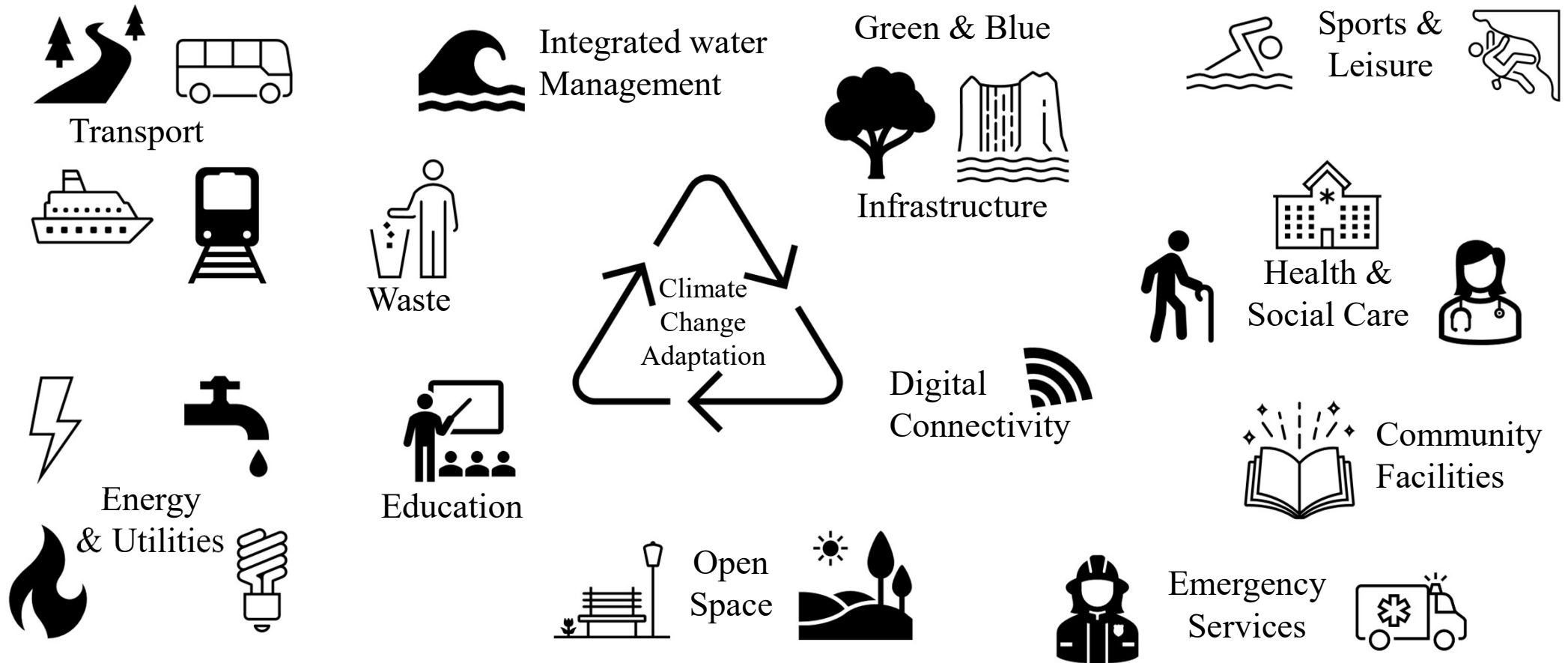
Local Plan preparation process



- IDP is a central tool to align the infrastructure aspirations of different bodies
 - Enabling local government to take a proactive approach to infrastructure delivery to support growth, needs and aspirations
- IDP goes beyond Local Plan

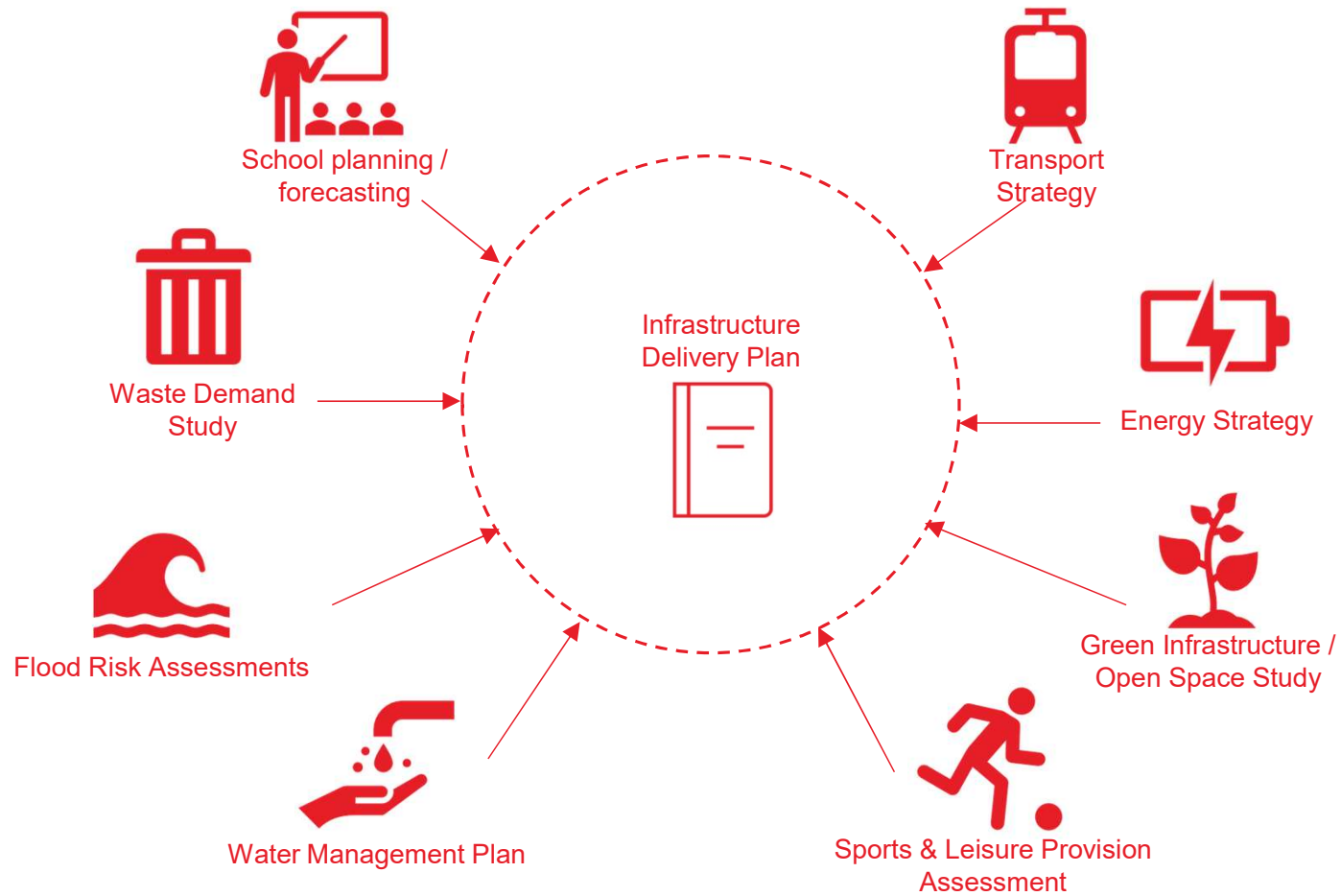
Types of infrastructure

What constitutes infrastructure?

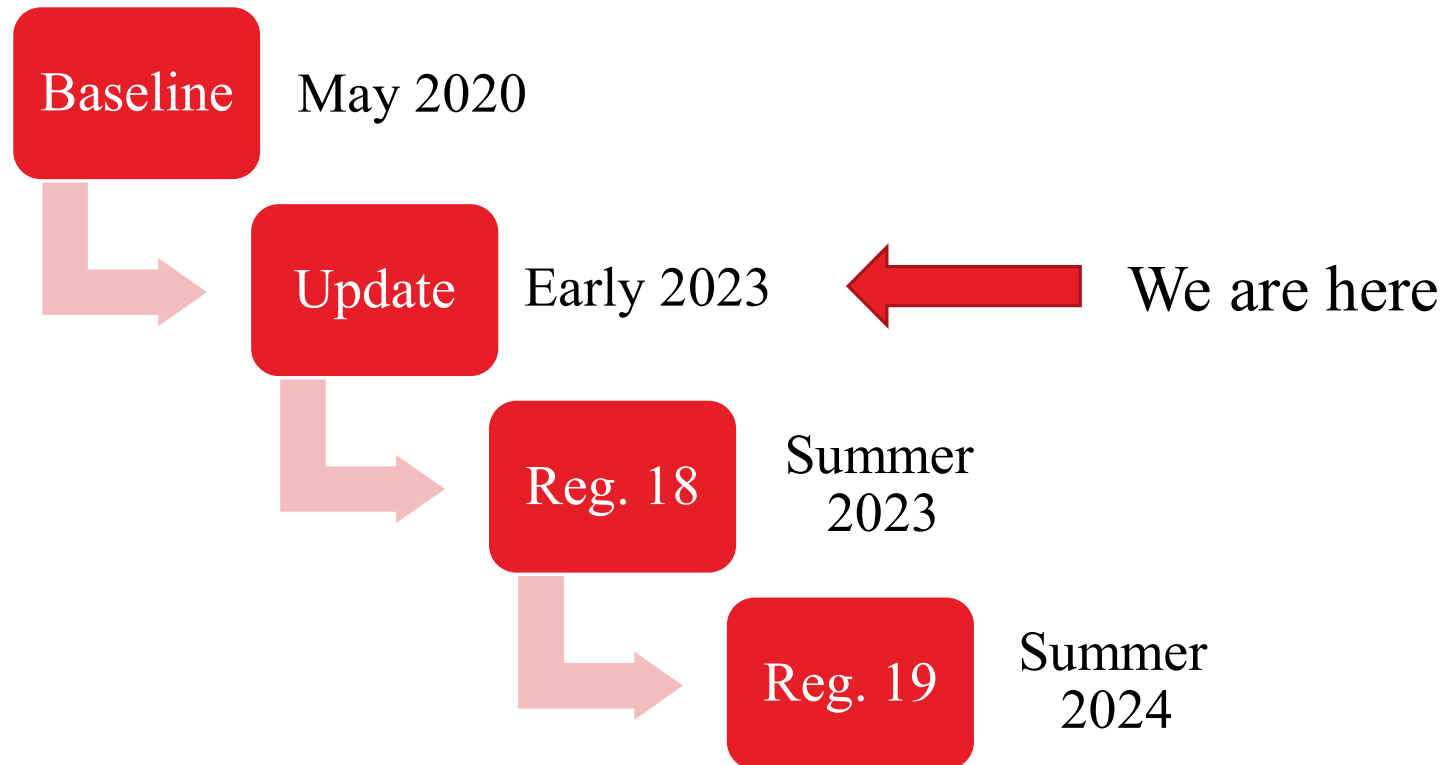


Infrastructure planning

Interaction with other evidence and infrastructure provider plans



Thurrock IDP Program



Consultation

In support of IBA update

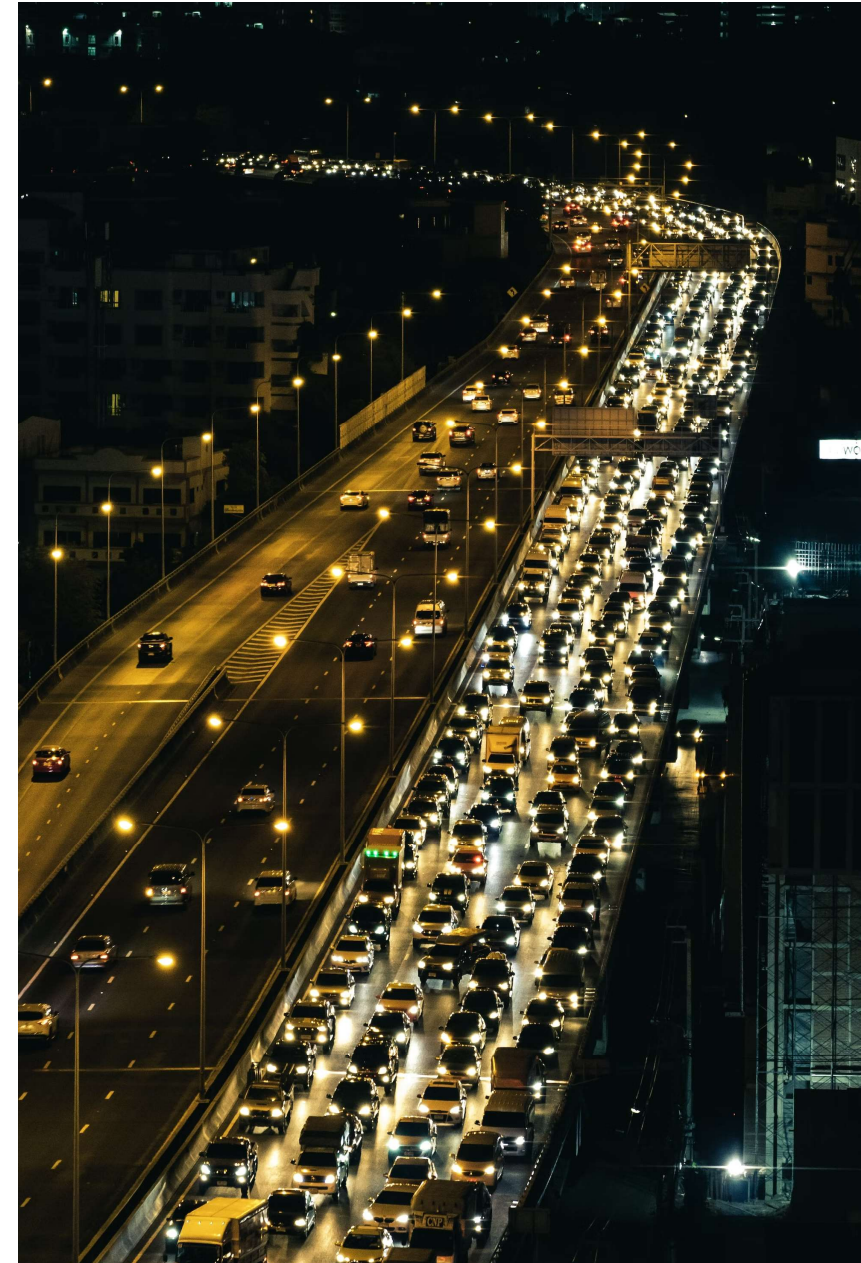
Infrastructure area	Consultation to date	Further consultation required
Transport	Workshops with Thurrock transport officers	Need further meeting on LTC
Integrated Water Management	Workshop with potable and waste water providers (Northumberland and Anglian) and AECOM (preparing Strategic Flood Risk Assessment)	Further engagement with AECOM once SFRA has been prepared
Utilities (electricity and gas)	Email consultation	Follow up email consultation
Education	Preliminary meeting with Thurrock secondary heads association (but not primary schools)	Need further discussions with Thurrock education officers and further email consultation with Thurrock secondary and primary heads associations
Health	Workshop with Thurrock health officers and NHS PCN and MSE Health and Care partners representatives	Need follow up discussions with MSE Health and Care Partnership
Green and Blue Infrastructure	Workshop with Thurrock officers	Follow up email consultation
Community	Workshop with Thurrock officers	Follow up email consultation
Sports and Recreation	Workshop with Thurrock officers	Follow up email consultation

Developer Forum – Local Plan and IDP

Thurrock infrastructure constraints
(summary of baseline infrastructure issues
by infrastructure area)

Transport – Highways

- Highway network has significant capacity issues and has little resilience – impacts on the M25 and A13 can affect whole Thurrock road network
- Specific capacity constraints identified include:
 - A13 generally (including A13/A1014 Manor Way Interchange, Western end of A13 Junction 30)
 - Main access into London Gateway / DP World Site / Thames Enterprise Park
 - Junction 31 in the west connecting onto the motorway
 - A1089 access to Port of Tilbury (namely Junction 30 to the west and Manor Way to the east)
 - A1014 connectivity into London Gateway and its ability to accommodate LTC traffic accessing the A13 through to Orsett Cock



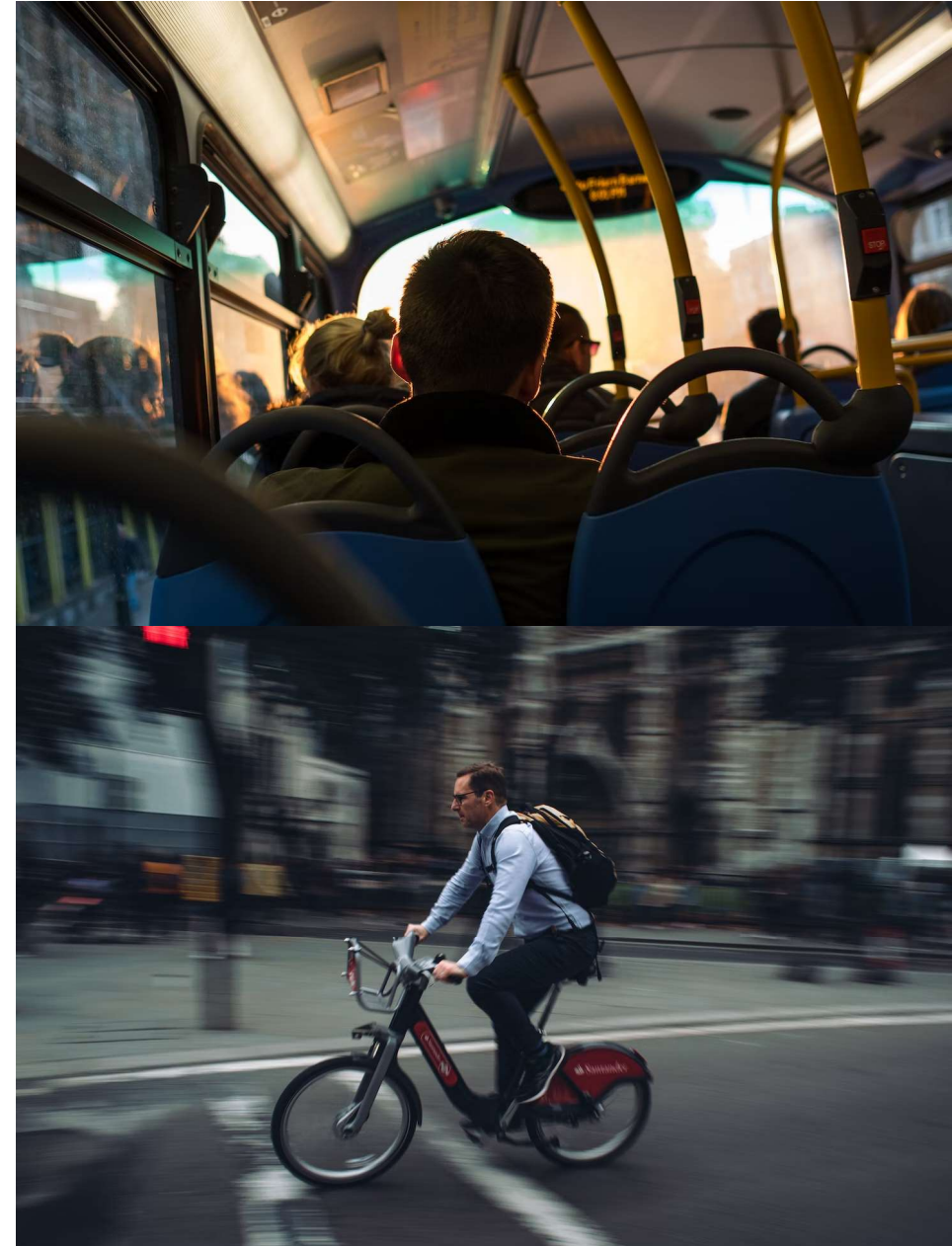
Transport – Highways

- Lower Thames Crossing
 - Council view that Lower Thames Crossing will make capacity issues worse and sever communities
 - Additional capacity delivered through recent schemes (such as A13 widening) will be taken up by predicted LTC movements
- Freeports and associated development also anticipated to put additional pressure on network
- In some areas, existing capacity constraints are preventing growth from occurring
 - For example, development being proposed off small lanes which would require significant upgrades to accommodate increased traffic
- Need to encourage greater modal shift to public transport and active transport
- Greater use of rail and short sea shipping?



Transport – Public transport and active travel

- Bus
 - Council undertaking a review of its supported bus service provision
 - Commercial bus operations are considered good – generally focused on existing urban areas, poor connections from rural communities
 - Bus Service Improvement Plan
- Rail
 - Underutilised network within the borough
 - Conflict between demand for more freight rail movements vs ensuring sufficient number of passenger spaces
 - Access to stations by public transport
- Walking and Cycling
 - Safe routes to school
 - Local Cycle and Walking Infrastructure Plan (LCWIP)
 - Active Travel Fund Schemes



Transport evidence base

New and forthcoming strategies and work

- Thurrock Transport Strategy (2013 – 2036)
 - Currently being updated by Mott MacDonald, Interim Transport Strategy completed
- Interim transport baseline
 - Work completed by Stantec in 2021
- Strategic transport model
 - Work being done by CityScience
- Quality Impact Assessment for subsidised bus routes
- Draft Active Travel Strategy
- LCWIP
- Bus Service Improvement Plan

Water – Supply

- Forecast deficit of water supply in Essex Water Resource Zone
- Deficit is due to:
 - CPO 18 climate change projections (bigger impact on the Essex deployable outputs of sources), equating to a loss of 10 megalitres a day
 - Change in the level of drought resilience needed (previously had to plan for service provision in a level 4 drought, for a one in 200 years event, now have to plan to one in 500 years).
 - New non-household demand resulting in a big reduction in deployable output.
- Need to explore opportunities to bring down per capita consumption
- Water providers are eager to work with Thurrock Council to better understanding phasing and growth – particularly for non-household demand in the first 5 yrs of the Plan



Water – Waste water

- Whole borough drains to Tilbury WRC
- Need for further investment in drainage capacity within the Tilbury catchment to accommodate further growth – increased drainage capacity is expected to include both Sustainable Urban Drainage Systems (SUDS) and the upsizing of existing sewers.
- Medium term strategy:
 - Increase attenuation within Tilbury’s network (such as storage tanks)
 - By 2050 improve process optimisation at the water recycling centre
 - Remove 10% of surface water
 - SuDS will be key within the catchment along with a focus on nature-based solutions
- Water Smart Communities initiative – large greenfield sites pose significant opportunities for integrated approach including rainwater recycling
- Opportunities to reduce per capita consumption (pcc) – reduction in volume treatment of waste water (target of 110 pcc for strategic sites)

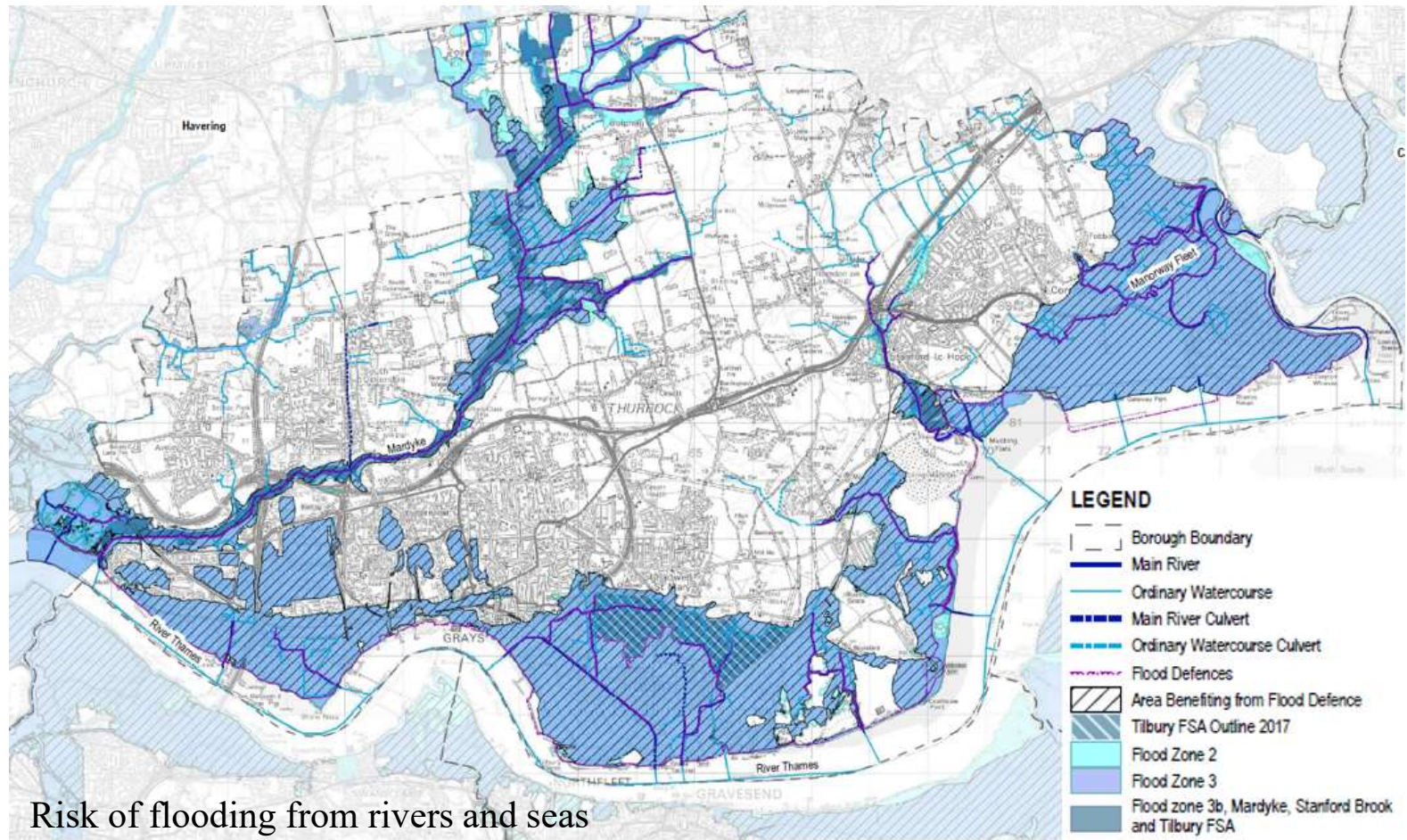


Integrated Water management

- The north of the borough is generally not susceptible to groundwater flooding, whereas the south is
- With regards to river flooding, the River Thames poses the greatest risk of flooding to communities in the south of the borough
- Few areas identified as Flood Zone 3B (functional floodplain) around the River Mardyke (around Purfleet and Chafford Hundred)
- There will always be a residual risk of flooding if defences breach due to operational or structural failure. The likelihood of such residual risk is however very small

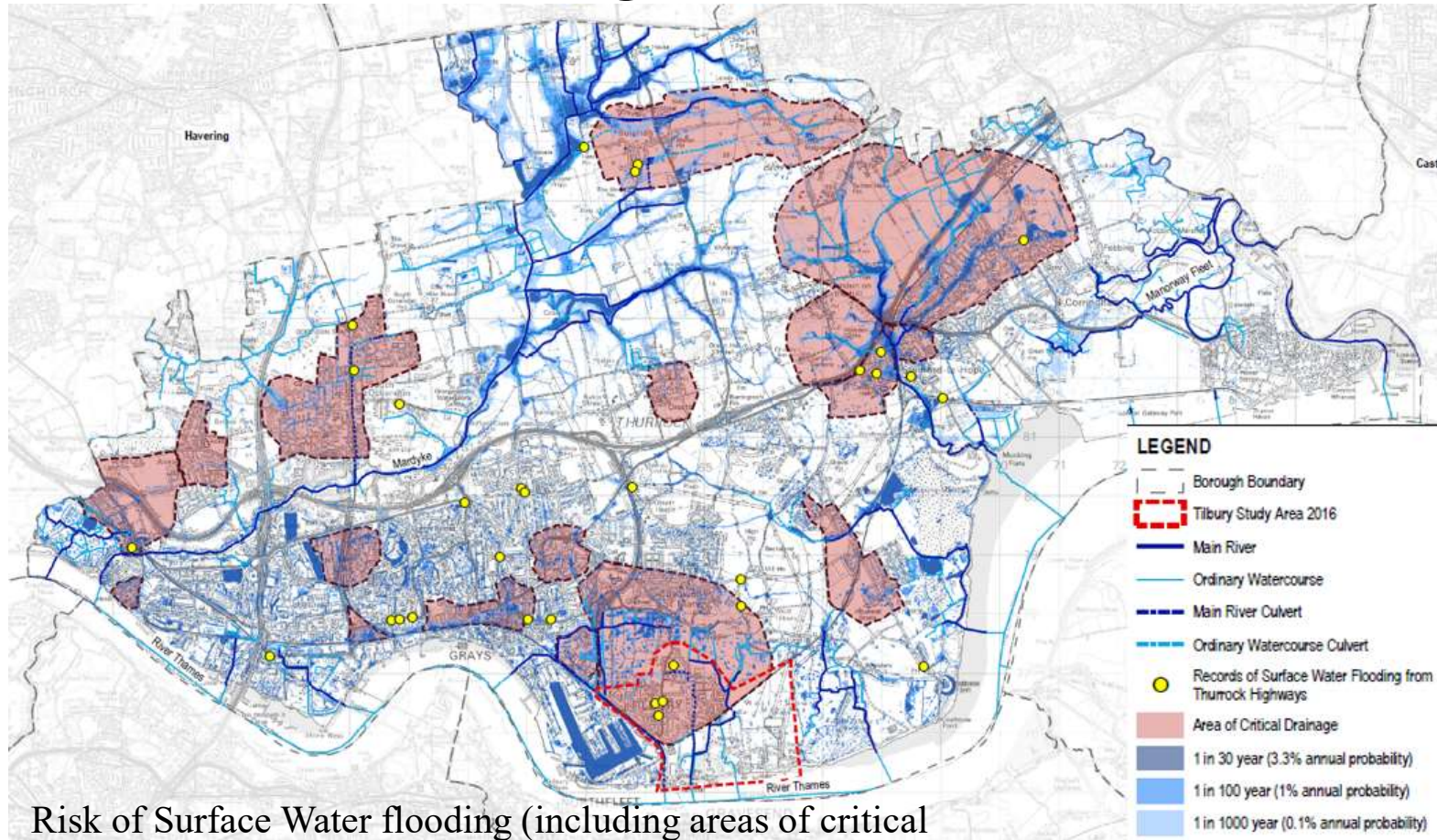


Integrated Water management



Risk of flooding from rivers and seas

Integrated Water management



Risk of Surface Water flooding (including areas of critical drainage)

Water evidence base

Potable water

- Essex and Suffolk - WMP 24 submitted to DEFRA, awaiting direction as to when to publish

Wastewater

- Anglian - Drainage and Wastewater Management Plan due to be published early 2023, to replace the Water Recycling Long Term Plan
- Forthcoming water cycle study by AECOM will feed into identification of key issues

Integrated Water Management

- Strategic Flood Risk Assessment (SFRA) being undertaken by AECOM
 - Modelling for the Thames assessment of residual risk
 - Mapping for Mardyke / Stanford Brook
 - General surface water mapping
 - Targeted information for Tilbury and West Horndon

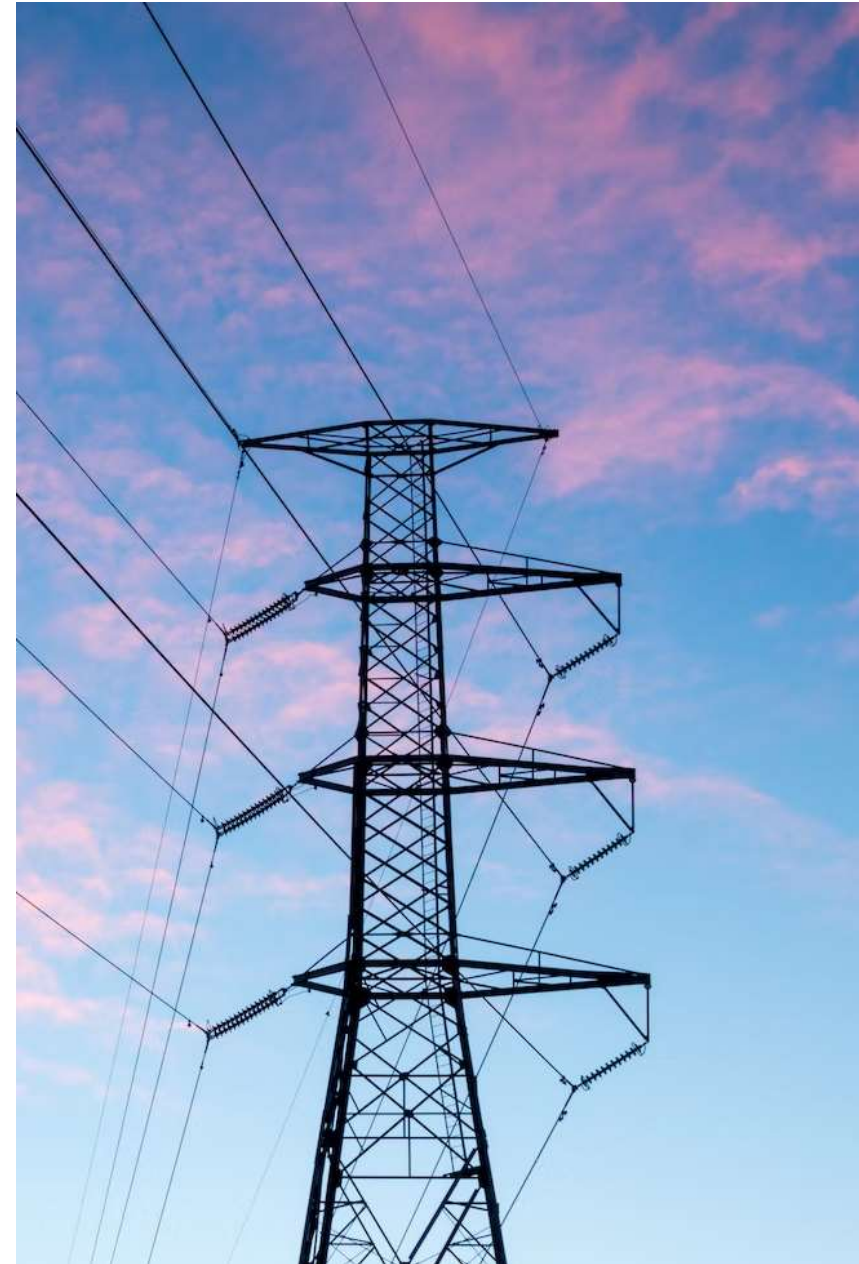
Electricity and Gas

Electricity

- There are some capacity issues across the whole network which will impact on broad growth locations across Thurrock
- Rainbow Lane Primary 11kV and West Horndon Primary 11kV run at full or nearly full capacity at present or will do in the near future

Gas

- Based on past capacities and demands, it is not anticipated that there will be a shortage in the existing gas network – especially considering the move towards renewable sources

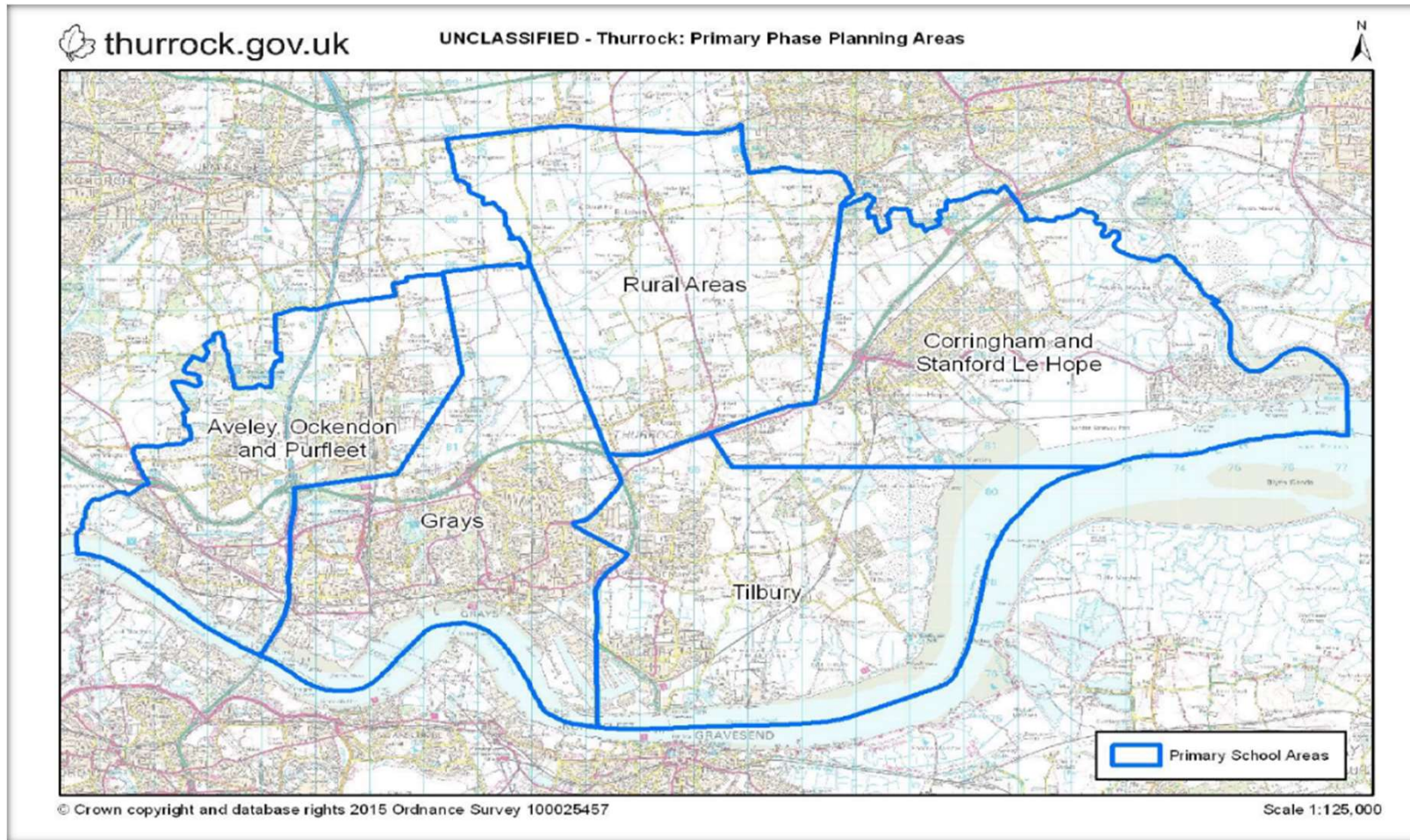


Education – Early years and primary

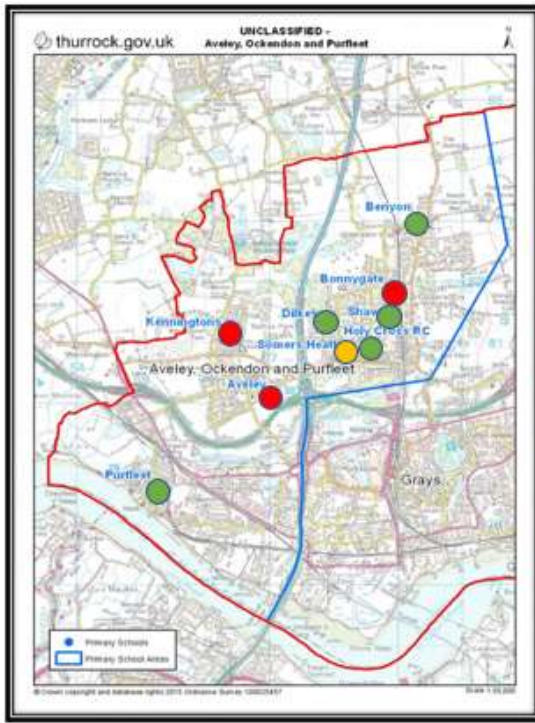
- Good provision of Early Years education/care, however there is a reported upward trend of working families (of 3-4 year olds) accessing funded hours
 - It is likely further provision will be required to meet growth in all areas where additional homes are being provided.
 - Any new primary school development should provide early years facilities.
- Forecasts indicate that there will be a shortfall of 607 primary school places in September 2023
 - While there is capacity in some schools, it does not align with demand
 - Popular schools oversubscribed



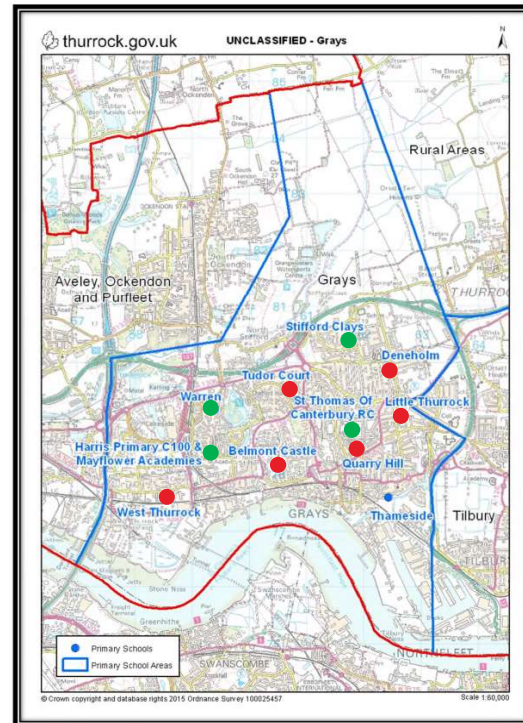
Education – Primary planning areas



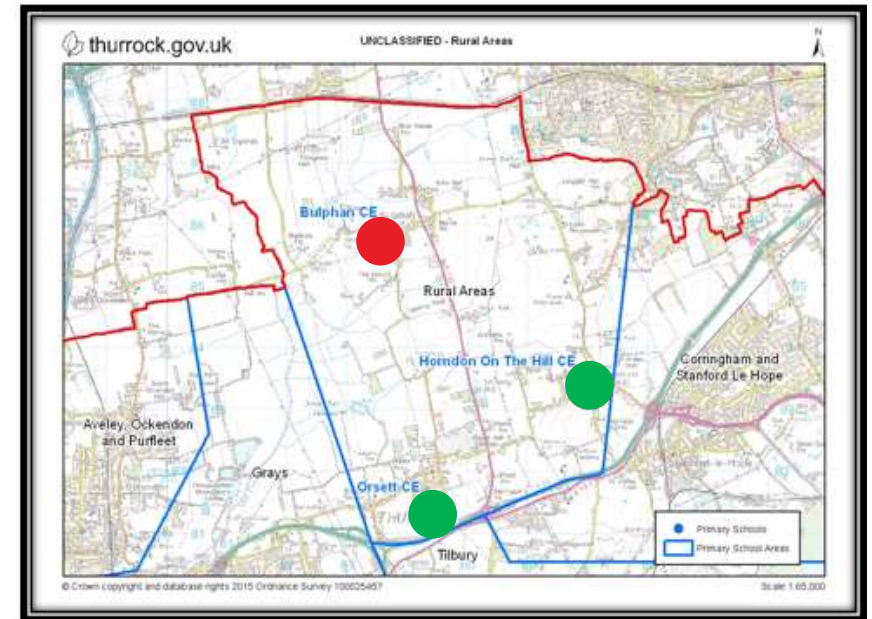
Education – Primary planning areas



Aveley, South Ockendon and Purfleet

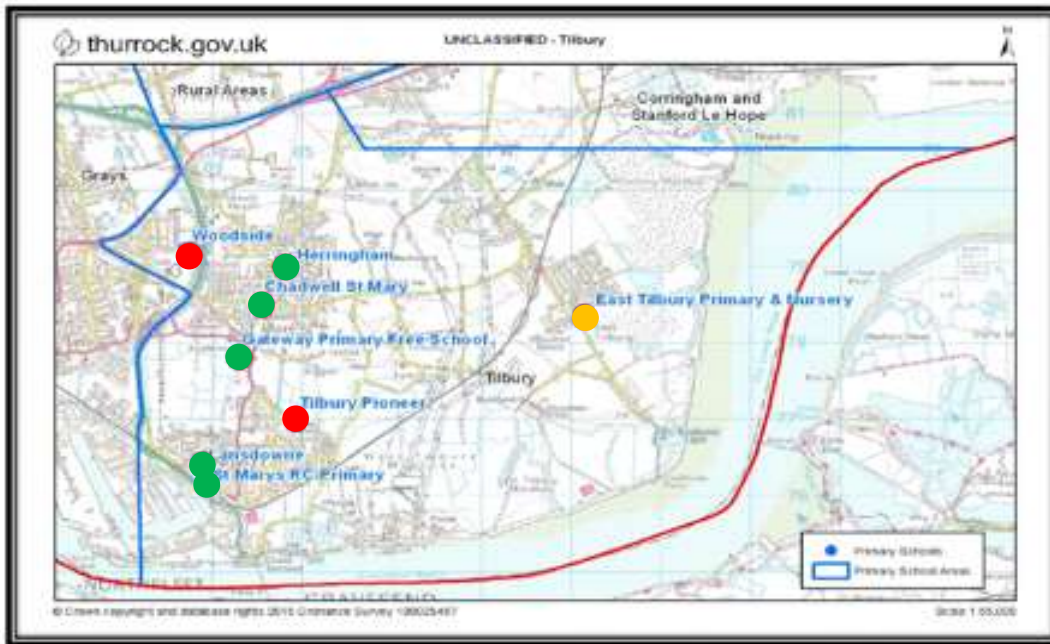


Grays

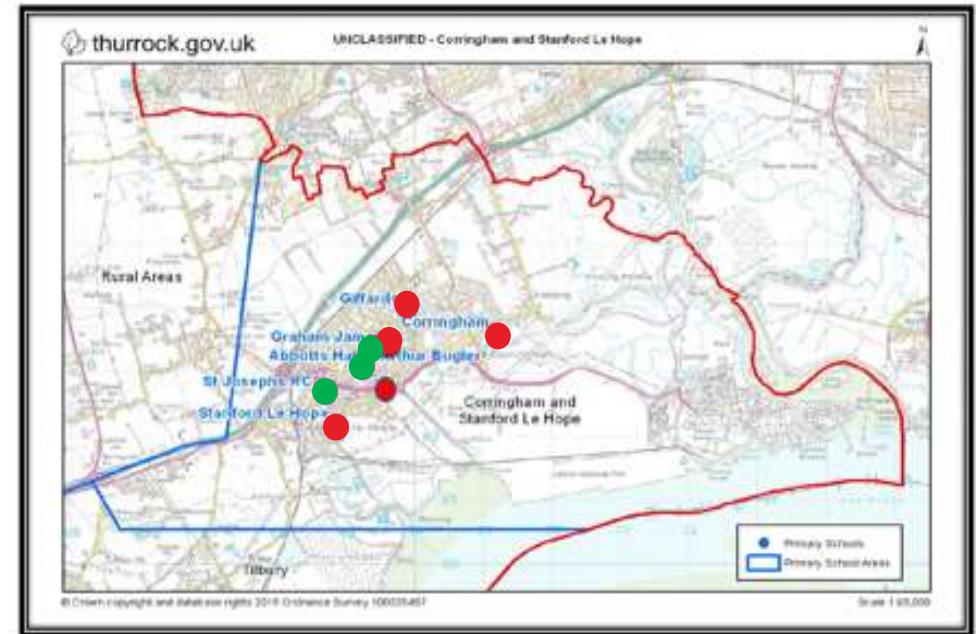


Rural areas

Education – Primary planning areas



Tilbury



Corringham and Stanford-le-Hope

Education – Secondary

Secondary

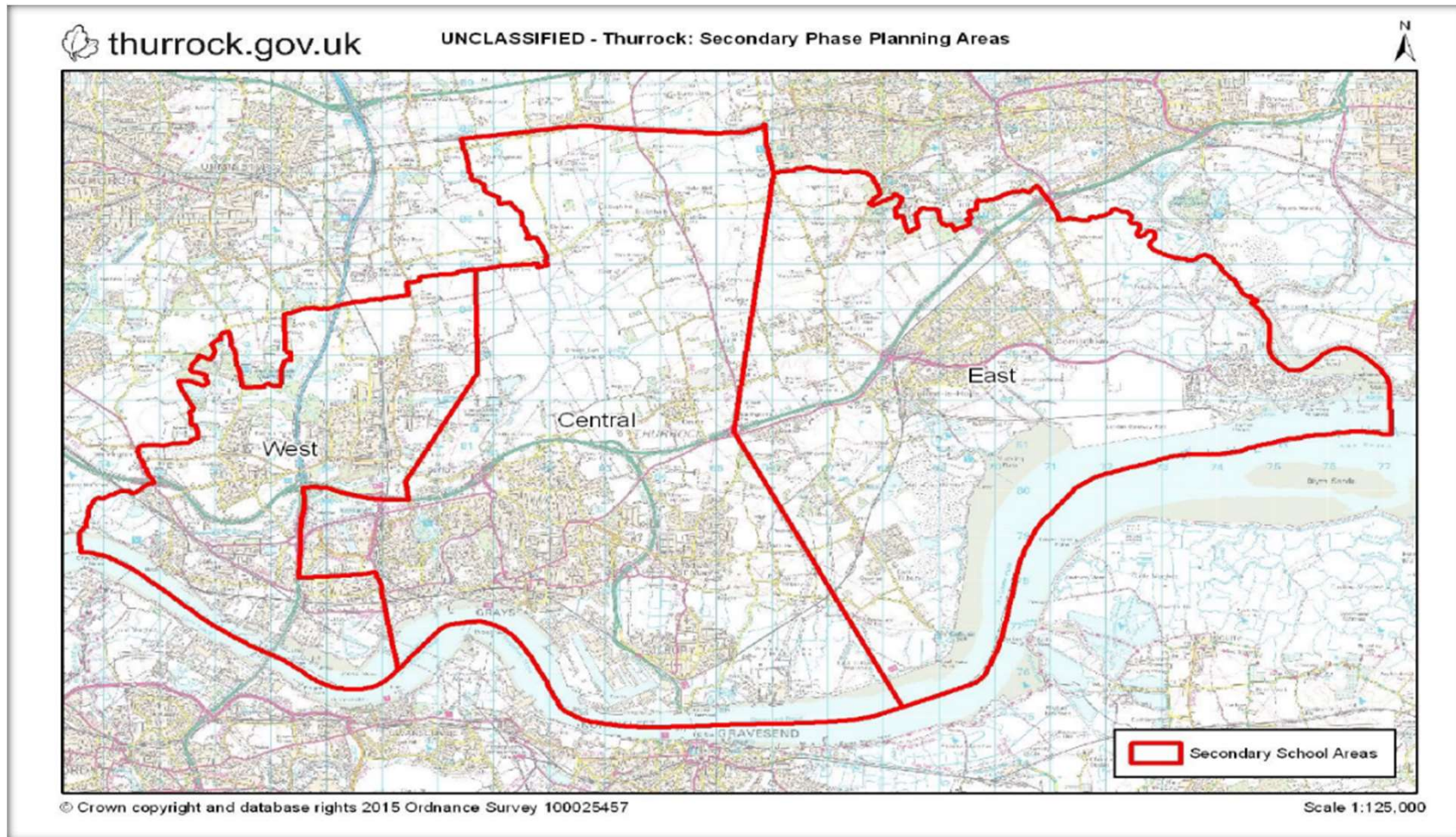
- West Planning Area: substantial capacity issues from 2022, with Harris Academy Riverside and Ockenden oversubscribed and rising
- Central Planning Area: capacity is fine overall until 2025 – however Grays Convent High School, Harris Academy Chafford Hundred, The Gateway Academy and William Edwards School will all be close to or over capacity beyond then if current rate of growth continues
- East Planning Area: anticipated to stay within existing capacity, but disparity between schools should be noted, with St Clare’s School over capacity

SEND

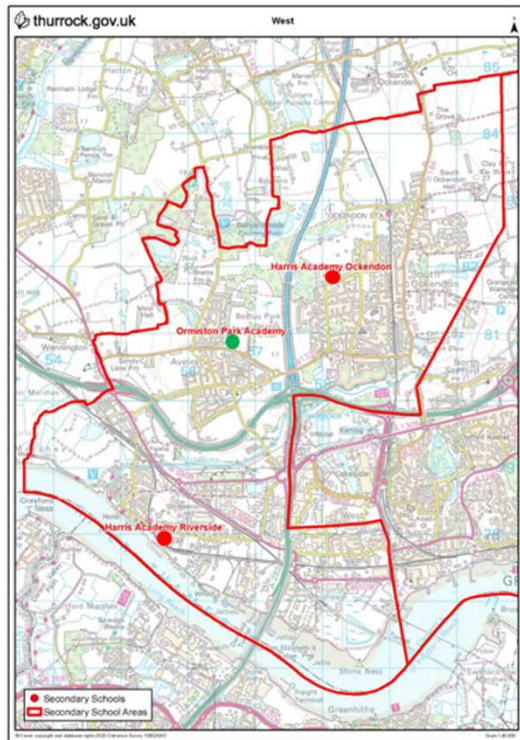
- Significant increase in demand for SEND places
- Potential opportunity for additional places to be commissioned as required and where possible during the academic year



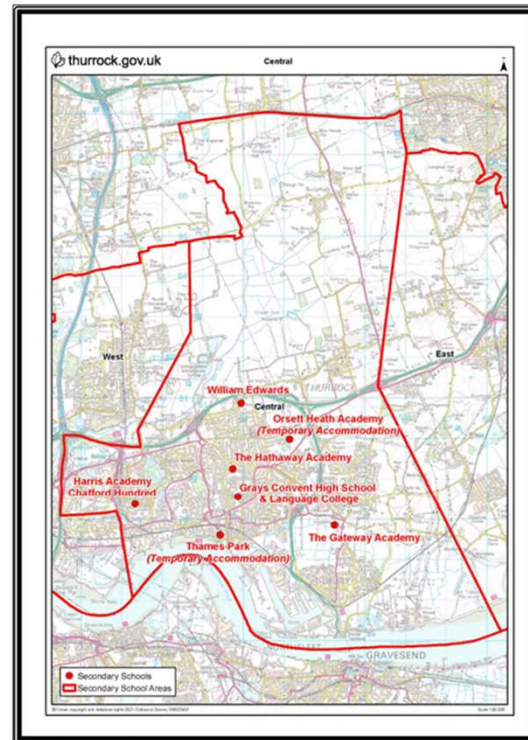
Education – Secondary planning areas



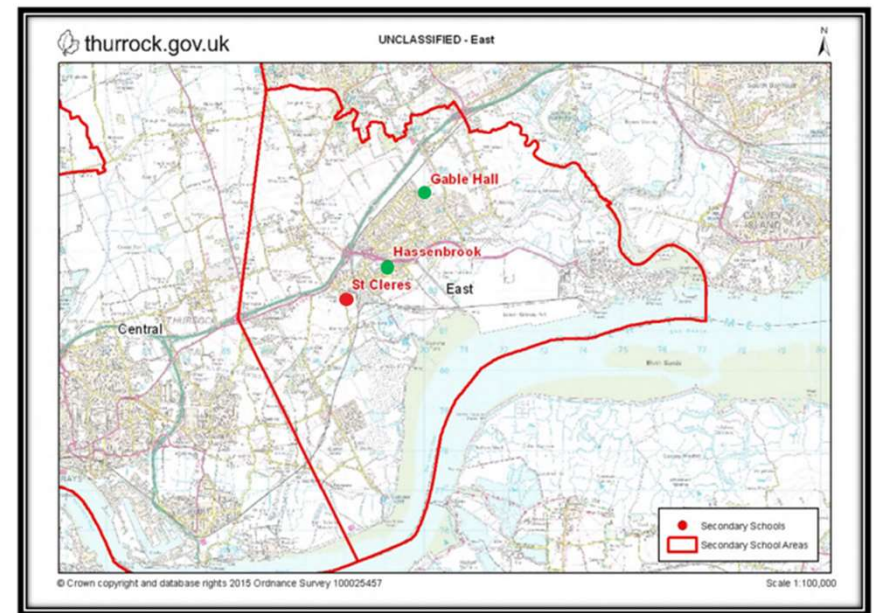
Education – Secondary planning areas



West



Central



East

Education evidence base

Existing and forthcoming strategies and work

Existing

- Thurrock Pupil Place Plan 2019-2023 (2019)
- Thurrock Childcare Sufficiency Assessment (2019)
- Thurrock Local Area Special Education Needs and Disability Strategy 2018-2020

Forthcoming

- Thurrock Pupil Place Plan 2022-2026
- School capacity survey (SCAP) returns to government data

Health

Primary care – GPs and healthcare hubs

- Shift towards integrated health and care model, based on Primary Care Network (PCN) areas and Integrated Medical & Wellbeing Centres (IMWC)
 - The Corringham IMWC is now open with further centres under development or construction in Tilbury, Purfleet and Greys
 - GPs in Thurrock currently have a higher number of registered patients compared with the national average
- This shortfall will need to be addressed in the immediate future and significant growth within the borough are likely to need to provide additional primary healthcare infrastructure
- Model for residential social care is changing – with greater at care home, this will have implications for growth

Secondary care – Hospitals and acute health services

- Orsett Hospital to close and facilities to be absorbed by IMWC's
- Rising demand for A&E and ambulance services in recent years has placed more strain on secondary healthcare



Health and Social Care evidence base

Existing and forthcoming strategies and work

- Mid & South Essex STP Primary Care Strategy (2018)
- Mid & South Essex STP Your Care in the best place (Decision Making Business Case) (2018)
- NHS Thurrock CCG Five Year Strategic Plan (2014-19)
- Thurrock CCG Operational Plan 2017-19
- Thurrock Integration and Better Care Fund: Narrative Plan 2017-19
- Thurrock Health and Wellbeing Strategy 2016 – 2021
- Thurrock Joint Strategic Needs Assessment Product for CCG (2012)
- FingerTips NHS Health Profile
- Adult Social Care in Thurrock 2018-2020
- Better Care Together Thurrock – The Case for Further Change (Integrated Care Strategy) 2022

Open Space and Green and Blue Infrastructure

- Generally Public Right of Ways (PRoW) in Thurrock are not part of a cohesive network, but disconnected, with the LTC expected to worsen this
 - Note that it is National Highways policy to return any impacted route as a bridleway
 - Rights of Way improvement plan has not progressed due to the high number of unknown impacts from LTC and the uncertainties around growth areas
- PRoWs provide a valuable green link throughout the borough
- New developments could be required to aid the provision of open space equipped for use by children and young people
- Council officers plan to harness new development to provide additional allotments that may alleviate waiting lists for existing provision, while ensuring new supply to meet the demands of future residents
- As a significant proportion of the borough lies in Flood Zones 2 and 3, the provision of green and blue infrastructure should be part of an integrated approach to flood risk mitigation, sustainable drainage and adaptation



Open Space and GBI evidence base

New and forthcoming strategies and work

- South Essex Association's Green and Blue Infrastructure Strategy will present a vision for a South Essex Estuary Park, which is being used to leverage money from LTC
- Local Nature Recovery Strategies – steering group looking at how this is developed in Essex
- LTC have commissioned studies to highlight where more Right of Way works are needed, with designated funds to be identified to help deliver this
- Previous open space strategy has not been published, but resulted in a list of priorities

Community

- Provision is not well spread across the borough (four out of six youth clubs are in two towns, being South Ockendon and Purfleet)
- No youth clubs east of Tilbury, an area which covers the towns of East Tilbury, Stanford-le-Hope, Corringham and Fobbing
- The already high demand for youth clubs is likely to increase with population growth
- There is a need for more flexible spaces to accommodate ad-hoc uses
- Many existing sites are in need of modernisation to respond to community need
- The operation of, and services available, at existing provision may need to adapt to accommodate more and varying demand with population growth.
- New facilities may need to be provided to meet future demand. Thurrock Museum in need of more storage space, as well as a refurbished gallery



Community facilities evidence base

New and forthcoming strategies and work

- Thurrock Council asset review underway, to be published Summer 2023
- Thameside Key Issues Cultural Plan underway
- Community Environmental Development Fund – £200k budget this year for groups to enhance an area of land or existing assets
- Full inventory of museum collection underway
- Feasibility study drafted to look into the potential for a local studies facility combining the local studies section in the library with the museum archives

Sports and Leisure

- Only 51.5% of Thurrock's population live within one mile (approximately a 20-minute walk) of a swimming pool – however, 100% of the population live within a 20-minute drive.
- Seven of the council-owned pools are beyond their anticipated life expectancy, of poor quality and at capacity during peak times.
- Capacity issues for gymnastics
- Pitch clubs reported latent demand – driven by a lack of playing pitches to field additional teams.
- All 3G pitches are currently at or close to capacity, reporting a need for further provision to meet future demand.
- Consultation highlighted an increasing demand for cricket squares (however Council has limited control over how private clubs manage demand or refurbish)
- Reported shortfall of rugby pitches in Central Thurrock



Sports and leisure facilities evidence base

Existing and forthcoming strategies and work

Existing

- Thurrock Council's Playing Pitch Strategy and Action Plan (2020)
- Thurrock Council's Playing Pitch Strategy Assessment Report (2020)
- Thurrock Council's Indoor Sport and Leisure Facilities Draft Assessment Report (December 2019)
- Public Right of Way Improvements Plan (2007)
- Consultation with representatives from Thurrock Council

Forthcoming

- Open space strategy (status unknown)
 - Green space section resulted in a set of standards
 - A separate prioritisation list has been developed

Next Steps

What we will deliver

- Update Infrastructure Baseline Assessment in accordance with new evidence base – including new strategies and consultation with Thurrock Council / external stakeholders
- Input to the development of the spatial strategy and the site selection process
- Identify opportunities for delivery of infrastructure
- Once spatial distribution of growth and sites for allocation confirmed – assess infrastructure needs, undertake/feed into modelling of infrastructure requirements
- Cost, phasing and delivery – identify sites/locations where appropriate
- Input to viability assessment
- Develop a draft Infrastructure Delivery Plan, which will be published alongside the Regulation 18 Local Plan, for public consultation (June 2023)