# Infrastructure Baseline Assessment

Thurrock Council

Members' Workshops

Monday 13th July 2020



Image: <a href="https://www.thurrock.gov.uk/growth">https://www.thurrock.gov.uk/growth</a>

### **ARUP**

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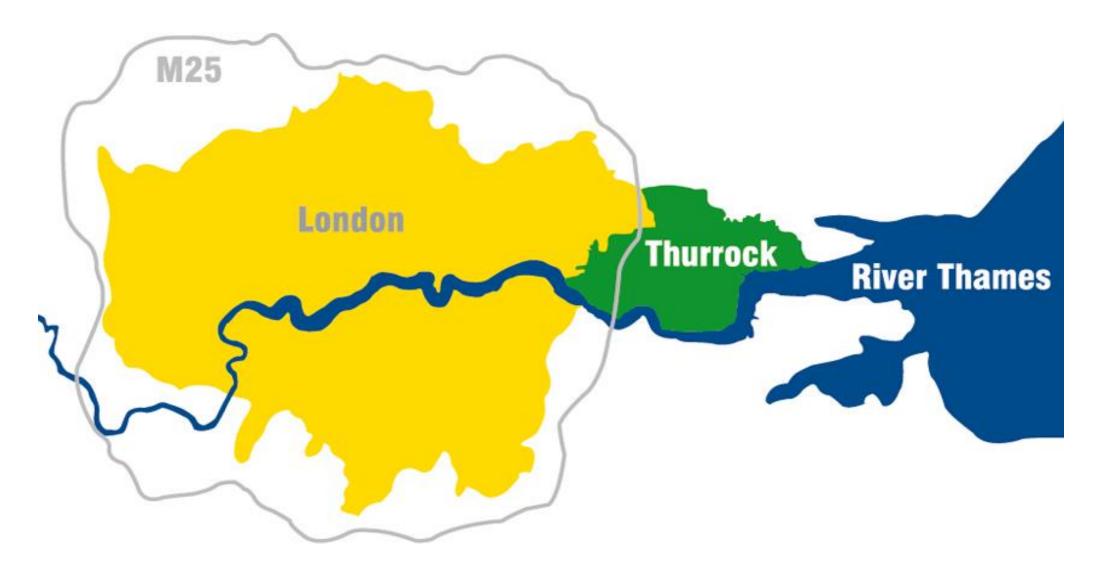
### Role, Scope and Purpose of the Infrastructure Baseline Assessment

- Thurrock Council has commissioned Arup to prepare the Infrastructure Baseline Assessment (IBA) forming part of the evidence base for the Local Plan. The Local Plan is infrastructure-led and infrastructure-dependent;
- The purpose of the IBA is to understand existing infrastructure provision across Thurrock, and what additional provision is required to support the level of planned housing and employment growth;
- Arup are undertaking the first stage of the IBA the Baseline Study. This covers strategic issues in relation to the planning and delivery of infrastructure, key areas of shortfalls in provision (or, vice versa, areas with capacity), current planned projects to meet future demand, and implications of this on growth.



### Thurrock Growth Aspirations

- Thurrock Council is currently progressing its Local Plan which will set out the levels and spatial arrangement of new housing and employment development across the borough in the period up to 2038;
- Issues and Options Stage 2 Consultation (Dec 2018 March 2019)
   setting out a series of spatial options to meet the future development need;
- The potential spatial scenarios include a new settlement, major urban extensions, small urban extensions, village extensions, other sites, and urban intensification;
- It is anticipated circa 30,000 new homes and 24,000 new jobs created;
- It is likely a combination of scenarios will have to come forward to accommodate the planned growth.



Map of Thurrock. Source: <a href="https://www.thurrock.gov.uk/living-and-working-in-thurrock/about-thurrock">https://www.thurrock.gov.uk/living-and-working-in-thurrock/about-thurrock</a>

# New Settlement Major Urban Extension > 1500 Dwellings Sinst Urban Extensions Village Extensions Other Stee West Horndon Urban Interestication itanford Le Hope Chadwell St Mary Grays -

Figure 16: Map showing spatial options - Based on sites/broad locations with developer interest NB. These are potential, broad options for growth not proposed allocations

### Role, Scope and Purpose of the Infrastructure Baseline Assessment

Group	Type	Infrastructure
Physical Infrastructure	Transport	Highways Lower Thames Crossing Rail Public Transport Active Travel
	Energy and Utilities	Electricity Gas Waste supply Waste water
	Flood Defence	Flood defence
	Climate Change Adaption	Climate Change Adaptation
	Waste	Municipal solid waste Commercial and industrial waste Construction and demolition waste Hazardous waste Agricultural waste Waste imports from London
	Digital Connectivity	Broadband Connectivity

### Role, Scope and Purpose of the Infrastructure Baseline Assessment

Group	Туре	Infrastructure
Social Infrastructure	Education	Early years Primary Education Secondary Education Further Education
	Indoor and Outdoor Sports and Leisure Facilities  Heath and Social Care	Indoor Sports Facilities Sports Halls Swimming pools Health and fitness facilities Indoor bowls Artificial turf pitches Outdoor Sports Facilities Football Rugby Cricket Tennis Netball Outdoor bowls Multi-use games area GP surgeries
	Heath and Social Care  Emergency Services	Police
	Efficigency Services	Fire Ambulance
	Community Facilities	Youth services Library service Community halls
	Green Infrastructure	Green Infrastructure networks
	Open Space Network	Parks and gardens Amenity greenspace Provisions for children and young people Natural and semi-natural greenspace Allotments Churchyards and cemeteries

# Methodology



#### **POLICY REVIEW**

Consider planning policy requirements for infrastructure planning.

#### REVIEW OF DOCUMENTS AND STRATEGIES

Review of existing documents, data, and strategies to provide a baseline of the current infrastructure and its capacity levels.

#### CONSULTATION

Undertaken with Thurrock Council and External Providers.

Identify gaps and rationalise inconsistencies, discuss the ability of current infrastructure to serve the existing population, and implications of planned growth.

#### **CONSULTATION DISCUSSION POINTS:**

CURRENT INFRASTRUCTURE CONSTRAINTS, SHORTFALLS OR ISSUES;

THE LIKELY DEVELOPMENT THRESHOLDS THAT WOULD TRIGGER THE REQUIREMENT FOR NEW INFRASTRUCTURE PROVISION;

EXISTING DEVELOPMENT PROPOSALS, SUCH AS PLANNED EXPANSIONS OR NEW PROVISION;

KNOWN CONSTRAINTS AND DISCUSSION ON RISKS AND OPPORTUNITIES FOR ALTERNATIVE DELIVERY MECHANISMS; AND

BROAD IMPLICATIONS OF SPATIAL SCENARIOS FOR INFRASTRUCTURE PROVISION.



# Emerging Findings: Transport



Highways

- Capacity constraints leading to congestion, overcrowding and journey time unreliability reported across the whole road network.
- Significant impact on north to south routes where there are already fewer strategic roads.
- Future plans to expand operations at both the ports and implementation of Lower Thames Crossing will exacerbate capacity issues, particularly on the A13, A1089 and A128.
- Transport modelling forthcoming to present the full extent of the implications of growth on the network

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Rail and Bus

- Ambitious plans for two new stations to be built at Stanford-le-Hope and at Corringham (not yet supported);
- Looking at sustainable freight movements but nationally recognised conflict between moving HGV movements from the road onto rail, while ensuring there is enough pedestrian capacity.
- Good bus use across district and rural accessibility.
- Looking to improve connections to key economic hubs and other key centres in South Essex.
- Integrated ticketing products for use on bus and rail are being explored.

# Emerging Findings





#### Active Travel

- Car travel remains the most common mode of transport in Thurrock.
- Great potential to increase the level of Active Travel, although current provision remains disjointed.
- Will require a comprehensive and strategic approach to delivery as part of development proposals.
- Aligns with other health and wellbeing agendas.

# Emerging Findings: Utilities

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Electricity

- Supplied by UK Power Networks.
- There are some capacity issues across the whole network which will impact the broad growth locations.
- Substations at West Thurrock, West Horndon, Tilbury and Grays run at full or nearly full capacity. There are upgrades planned at all four substations to supply connections approved, but with little headroom.



- Supplied by Cadent Gas.
- No known gas shortages.

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Portable Water

- Supplied by Essex and Suffolk Water.
- No concerns for water supply, even when factoring in future growth.



Waste Water

- Supplied by Anglian Water.
- Planned reinforcement at Tilbury WwTW between 2030-3035. This will accommodate planned growth in the Tilbury catchment area.
- Upgrades may be required at Stanford-le-Hope WwTW.

# Emerging Findings: Flood Defence



- Flood risk has major implications for determining the location of growth across the borough.
- A vast area of the borough lies within Flood Risk Zone 3.
- The sequential test should be applied through the site selection process currently being undertaken by the Council to determine growth areas.
- Environment Agency has agreed with the Council that development can be allocated within Flood Risk 3 where it is proven to pass the Exception Test (where it is demonstrated development cannot to located in a lower flood risk area).

- There are 14 Critical Drainage Areas. Adequate drainage infrastructure will have to be included as part of any development proposal in these areas.
- The Local Plan is likely to include a policy requirement for strategic sites along the river front to integrate flood defences within the development.
- SFRA Level 2 report expected later this year.

# Emerging Findings: Education





Primary Education

Primary Phase Planning Areas

#### Aveley, Ockendon and Purfleet

- Currently, and will continue to be, at capacity.
- Some capacity at Purfleet and Shaw School but that will be filled by 2024.
- Expansions planned at Benyon, and either Aveley or Kennington school.
- Additional provision still required to support future growth.

#### Grays

- Majority of schools have some additional capacity to 2023.
- Harris Mayflower has significant capacity as they expanded its forms of entry from 3FE to 5FE in 2016.

#### Tilbury

• The majority of schools are at or over capacity.

#### Corringham and Stanford-le-Hope

- All schools nearing or over capacity.
- Abbots Hall and Corringham schools are exploring opportunities to expand.

#### Rural

- Slight shortfall of places.
- Low levels of planned growth here so students should be accommodated.

# Emerging Findings: Education



Secondary Phase Planning Areas

#### West

- 667 surplus secondary school places.
- Largely due to the opening of the Harris Academy Riverside in 2017.

#### Central

- Very constrained.
- Three of the five secondary schools over capacity.
- Two new free schools planned to offer temporary accommodation in September 2020.
- New provision planned to open at Thames Park Secondary and Orsett Health Academy this year.

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#### East

• With planned expansion at St Clere's, none of the schools will have a shortfall of capacity.

Despite planned expansions and new builds, further schools are required over the Plan Period.

# Emerging Findings: Health



- Thurrock CCG has a total of 31 doctor's surgeries however data suggests that the existing provision does not meet the needs of the population.
- In 2016, Thurrock was found to be the most undoctored area of England.
- In the UK there is an average of 1,818 patients per GP; in Thurrock there are 2,739 patients.
- Plans are underway to develop four new Integrated Medical Centres at Tilbury, Purfleet, Corringham and Grays.

# Current Position and Next Steps

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#### **Current Position**

The first draft of the IBA has been completed and is under review.

#### **Next Steps**

The second stage of the IDP will be undertaken once the spatial strategy for growth, including housing numbers, distribution and trajectory is confirmed.

The second stage will consider the additional infrastructure required to support planned growth across Thurrock.

This includes information on the location and quantum of infrastructure required, as well as the phasing of infrastructure delivery, the costs and the available funding. This will enable funding gaps to be identified.

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# QUESTIONS

## THANK YOU AND GOODBYE

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