

Thurrock Local Transport Plan

ISSUES Sopportunities

Thurrock Urban Area FEBRUARY 2023





A. S.



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	GLOSSARY

This document summarises the findings of a Transport Baseline Study undertaken by Stantec Limited. Maps and diagrams are reproduced from that report with their kind permission.



This document produced with the asssitance of Latcham Limited and Doyle Design LLP



LATCHAM

Issues and Opportunities

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1. INTRODUCTION

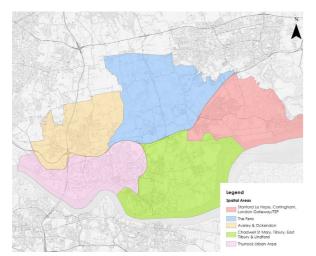


Figure 1. The five sub-areas studied (Stantec)

Introduction

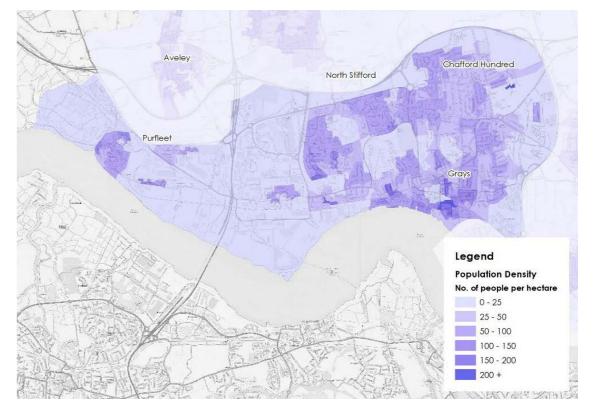
- A Study documenting the existing transport and travel situation has been undertaken for the Council by consultants Stantec Limited.
- Transport issues have been assessed on a borough-wide basis and also in five sub-areas defined on the basis of shared characteristics.
 - Stanford-le-Hope, Corringham, London Gateway/Thames Enterprise Park.
 - The Fens.
 - Aveley and Ockendon.
 - Chadwell St Mary, Tilbury, East Tilbury and Linford.
 - Thurrock Urban Area.
- Development and transport network opportunities for each area that might benefit residents and employers have been identified.
- The borough-wide and five sub-area studies form the basis of the transport planning evidence for the emerging Local Plan.
- This document includes the findings of one of the five sub-areas- Thurrock Urban Area Transport Baseline Study.

Data sources

- 1.0 The Transport Baseline Study uses data from several sources:
 - Census 2011
 - Department for Transport
 - National Travel Survey (NTS)

Figure 2. Thurrock urban area (Stantec)

- TEMPro 7.2
- Ordnance Survey
- Office of Rail and Road
- Royal Mail postcode
- Police injury accident records
- Thurrock Council
- Supplemental data and feedback from key stakeholders on the primary challenges, aspirations, and opportunities they face have also been incorporated.



1.0

1.0

Figure 3. Thurrock urban area population density (Stantec)

Structure

- 1.0 The report is structured around six themes:
- Accessibility the extent to which individuals and households can access day-to-day services, such as employment, education, healthcare, food stores and town centres.
- LO Congestion the degree to which travel demand is greater than the capacity of the network to accommodate within a given period.
- Mobility the ability of people and goods to move efficiently and freely around an area- is a crucial factor in economic growth and the population's wellbeing. It primarily concerns the opportunity to travel and the network connections available.
- Safety the injuries and causalities that occur due to interactions between users of the transport network.
- Pollution carbon reduction and health examine the trends and impacts of the transport network in terms of the pollution impact, the trends in carbon production and how this interacts with public health.
- Affordability demographic factors which shape travel behaviour by changing the needs and costs of travel. Stakeholder feedback on the primary challenges, aspirations, and opportunities they face and supplemented the data

Thurrock Council

Thurrock Urban area

Thurrock urban area lies in the south western area of the borough, bound by the A13 to the north, the A1089 to the east and the River Thames to the south. The area comprises the towns of Grays, Chafford Hundred and Purfleet to the west. The M25 bisects the area running north-south with Lakeside to the east and Purfleet to the west.

The Thurrock Urban Area has an average population density of 67 people per hectare. Population density is higher in the eastern parts of the area around Grays and Chafford Hundred and lower west of the A126, with higher density pockets in Purfleet.

2. ACCESSIBILITY



Movement within Thurrock Urban Area

- Figure 4 illustrates employment travel 2.0 demand and mode share of trips to the Thurrock Urban Area. The figures represent average weekday daily demand and estimate 2019 demand from 2011 Travel to Work data.1
- This shows that many employment trips 2.0 come from outside Thurrock, with 77% of these made by private car. Internal trips also make up a significant portion of employment travel to the area. These trips are primarily made from personal car journeys, with 18% completed on foot and 7% made by bus.
- Further travel is made to the area from the 2.0 south and north western parts of Thurrock. Again, these trips are made mainly by car drivers (between 65 and 70%).
- Figure 5 illustrates employment travel 2.0 demand and mode share of trips from the Thurrock Urban Area, with the figures showing estimated demand based on the same data.

1 Figure will be updated following analysis of recently published 2021 Census data.

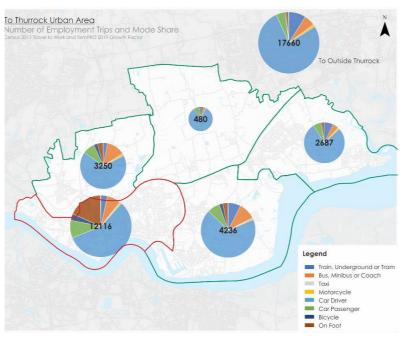


Figure 4. Employment travel demand and mode share of trips to the Thurrock Urban Area. (Stantec)

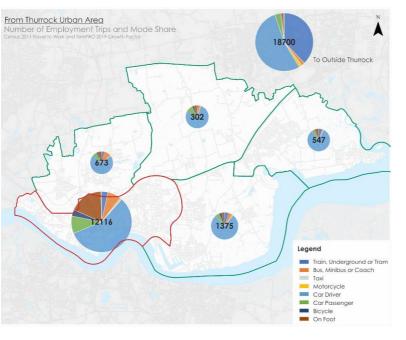
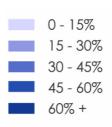


Figure 5. Employment travel demand and mode share of trips from the Thurrock Urban Area (Stantec)

Figure 6. Active travel mode share -Census 2011 mode share (Stantec)



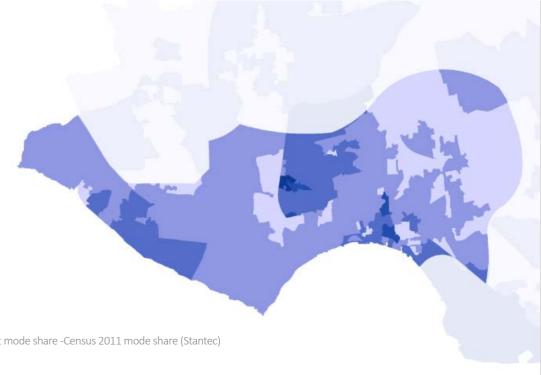
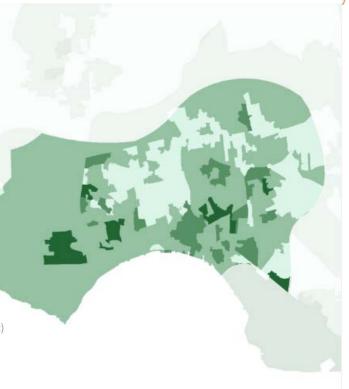


Figure 7. Public transport mode share -Census 2011 mode share (Stantec)

This shows much of the employment 2.0 demand from the Thurrock Urban Area travels to areas outside of Thurrock, with 53% of people travelling to employment destinations outside of Thurrock by private car. Notably, a significant proportion of these employment trips travel by rail to the outside of Thurrock (38%).

2.0

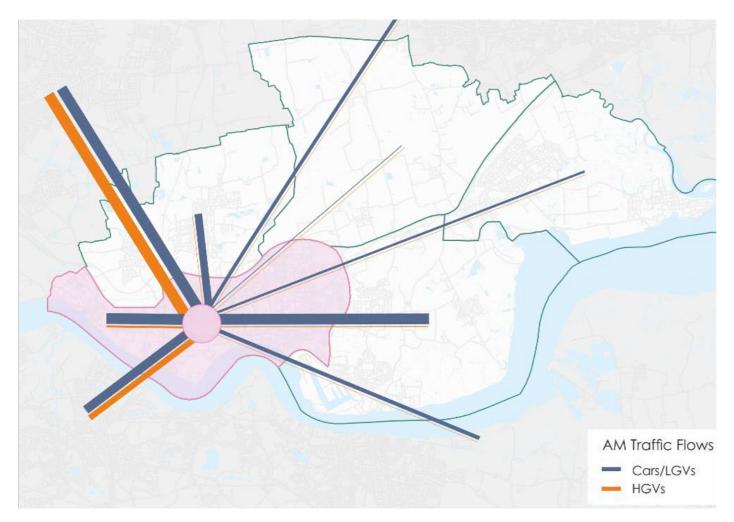
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Travel by Active Modes and Public Transport

An analysis of 'mode share employment trip data' (Census 2011) shows that, on average, 7% of the population in this area use active travel modes (walking and cycling) when travelling to work.

Active travel is mixed throughout the area, with areas of higher active travel use in areas nearby railway stations.



2.0

Figure 8. Car/LGV travel and HGV travel to the Thurrock Urban Area- LTAM model. (Stantec)

Public transport use for employment trips is also mixed throughout the area, with an average of 21% of the Thurrock Urban Area using public transport for employment trips. There is increased use in Purfleet, Lakeside and Grays. There is less public transport use in more residential areas of Chafford Hundred and Stifford Clays.

HGV Movement

- The Lower Thames Area Model cordon model has been used to analyse trips to and from the spatial areas within Thurrock and movement to and from outside of Thurrock in the north west, north east, south west and south east. The map shows the zones modelled and has been used to analyse Heavy Good vehicle (HGV) movement.
- Figure 8 illustrates car/Light Goods vehicle (LGV) travel and HGV travel to The Thurrock Urban Area. Travel to this area comes mostly from internal trips, the southern area, and outside Thurrock from the north and south western areas.

There is high HGV movement to the area, with 1467 HGVs travelling to the area in the AM peak hours (20% of all traffic travelling to the area). Approximately 85% of HGV trips come from outside of Thurrock.

Accessibility to Local Facilities

- The Thurrock Urban Area has good accessibility to bus stops and secondary schools located throughout the area.
- There is reasonable access to primary schools, particularly surrounding Grays and Chafford Hundred, with fewer primary schools located further west towards Purfleet and South Stifford.
- 2.0 Similarly, there is average accessibility to GP surgeries, primarily located in the east of the area, and reduced accessibility in the central parts.
- Accessibility to local food stores is low, with only 30% of the population able to walk to a food store within 400m. There is limited accessibility to food stores in Purfleet and South Stifford.

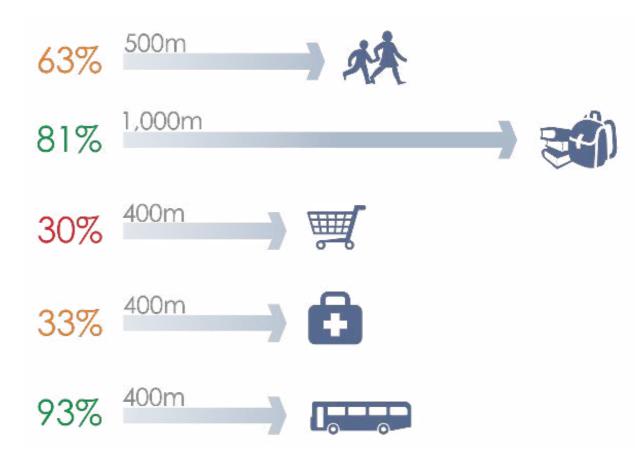


Figure 9. Accessibility to local facilities in Thurrock urban area. (Stantec)

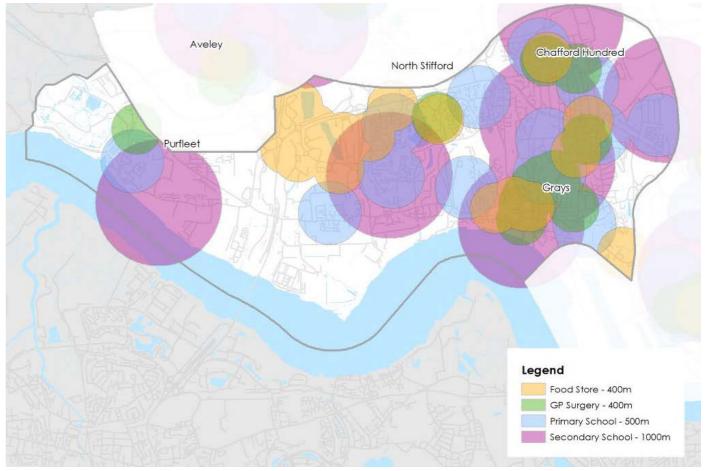


Figure 10. Accessibility to local facilities in Thurrock urban area. (Stantec)

3. CONGESTION

Thurrock Council

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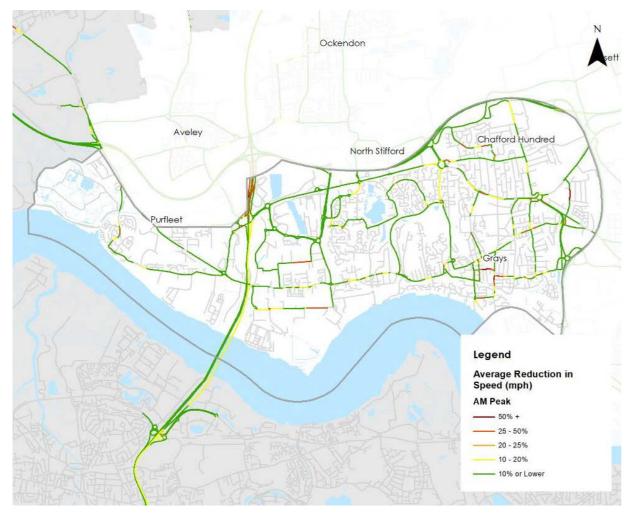
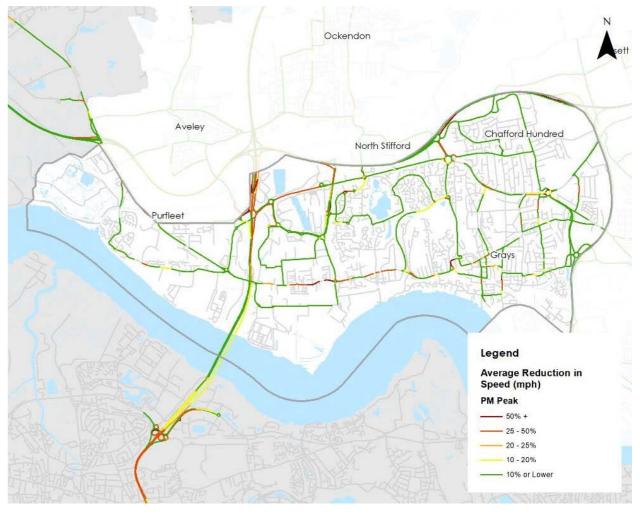
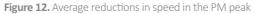


Figure 11. Average reductions in speed in the AM peak

Average Delay –AM and PM Peak

- ^{3.0} 'Trafficmaster' speed data has been sourced to analyse the difference in speeds between inter-peak hours and the AM and PM peak hours. A reduction in speeds in peak hours would indicate a delay on the road network, either due to the volume of traffic or issues at junctions.
- There is some speed reduction across the area in the AM peak hour, with more significant delays in some parts of Grays. Most notably, there is delay on the M25 and A282 leading to Queen Elizabeth II Bridge. National Highways predicts that the creation of the Lower Thames Crossing would reduce delays and congestion on A282 and around the Dartford Crossing.
- ^{3.0} There is considerably more delay in the PM peak hour, particularly on the M25 between junction 30 of the M25 and Queen Elizabeth II Bridge. There is a further reduction in speeds on London Road travelling between Grays and the M25, as well as along the Arterial Road West Thurrock north of Lakeside.







4. MOBILITY

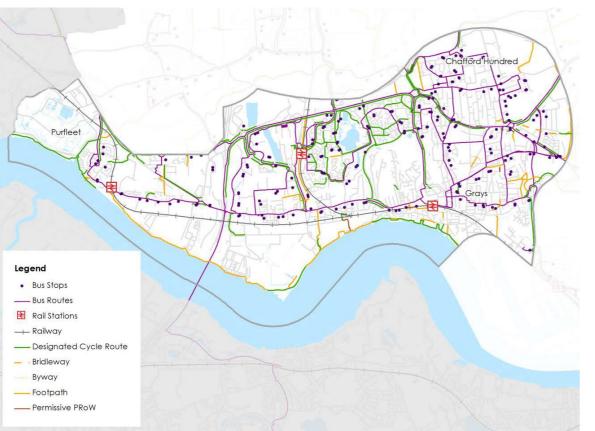


Figure 13. Key transport links in the Thurrock urban area (Stantec)

Road Network and Bus Services

- The A13 bounds the Thurrock Urban Area to the north, connecting to the M25 at junction 30. Other junctions along the A13 include the A126 towards Lakeside and at the A1012 to Chafford Hundred. The absence of east-facing slips at the A13/A126 junction is proposed to be resolved through changes to the junction of A13 with B186.
- The area is well served by several frequent bus services, including the 33 running every 15 minutes, the 66 and 88 running every half an hour, and the 5/5A/5B services running every half an hour².
- Five bus routes also serve Purfleet, including the 22 and 44 running every 20 minutes.
- 2 Pattern of services in 2019 when the original assessment was undertaken. Some bus services have since been withdrawn.

Rail Services

The area has three rail stations: Grays, Chafford Hundred and Purfleet. These provide direct connections across Thurrock as well as to Rainham and Dagenham to the west and Upminster to the north

Walking and Cycling Infrastructure

- 4.0 Designated cycle routes are located around Chafford Hundred, including Chafford Gorges Nature Park. Other cycle infrastructure is provided around Purfleet.
- 4.0 There are fewer Public Rights of Way in this area, with notable walking routes adjacent to the River Thames in the south and a north-south link adjacent to Lakeside.

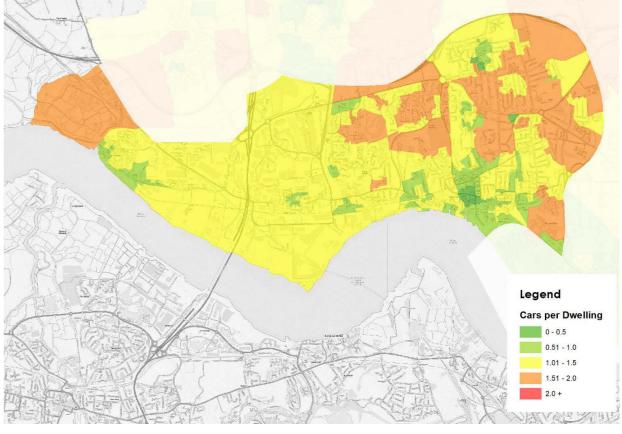


Figure 14. Car ownership in the Thurrock urban area (Stantec)

Car Ownership

- 4.0 Car ownership is lower in this area than in other parts of Thurrock, most notably in areas of Grays with 0 –0.5 cars per dwelling.
- 4.0 There is higher car ownership in Purfleet and areas around Little Thurrock and Chafford Hundred.





5. SAFETY

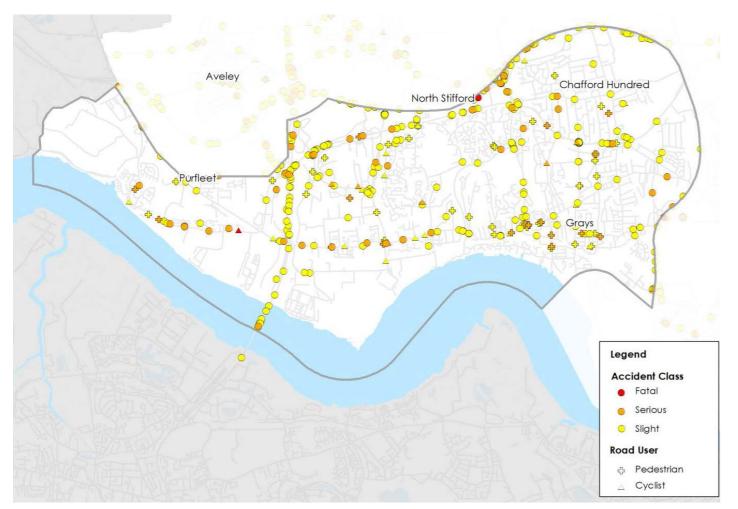


Figure 15. This map shows slight, serious and fatal accidents recorded over a three-year period in the Thurrock Urban Area using Thurrock Council data (Stantec)

Accident Data Overview

- Figure 15 shows slight, serious and fatal 5.0 accidents recorded over three years in the Thurrock Urban Area using data from Thurrock Council.
- There was a total of 350 road traffic 5.0 accidents across the area between 2017 and 2019, with two fatal accidents (1%), 66 serious (19%) and 282 slight accidents (81%).
- Several accidents in the area involved 5.0 vulnerable road users, with 30 involving cyclists (9%) and 53 involving pedestrians (53%). Many of these accidents are in and around Grays.
- Two fatal accidents were recorded across 5.0 the three years; one on the A13 in 2017 involved a private car near the junction with the A1012. The second fatal accident occurred in 2018 and involved a cyclist fatality on London Road in Purfleet at the junction with Vellacott Close.

6. POLLUTION, CARBON **REDUCTION AND** HEALTH

Air Quality Trends

- Several Air Quality Management Areas are 6.0 in the Thurrock Urban Area:
 - Surrounding Crown Road and Orsett Road in Grays;
 - Sections of London Road between Grays and the M25;
 - Sections of London Road and Arterial Road in Purfleet.
 - Significant parts of Arterial Road West Thurrock between the A126 and the A1012; and
 - A section of A1012 Elizabeth Road.
- Air quality data for this area has been 6.0 provided by Thurrock Council and taken from 'NO.diffusion tube' sites across Thurrock. Data has been analysed between 2008 and 2018 to understand air quality trends over the ten years .
- The data shows that the annual mean 6.0 concentration of NO. has steadily decreased over the ten years, with an average of 38.4 μ g/m. across all years. This is almost 50% higher than the national average mean concentration of NO.(19.6 μg/m., according to Ricardo Energy & Environment statistics provided by gov.uk).

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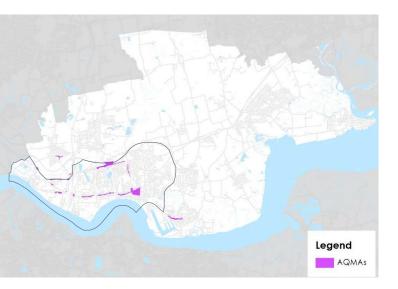


Figure 16. Several air quality management areas are located in the Thurrock Urban Area: (Stantec)

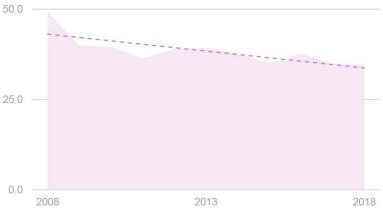
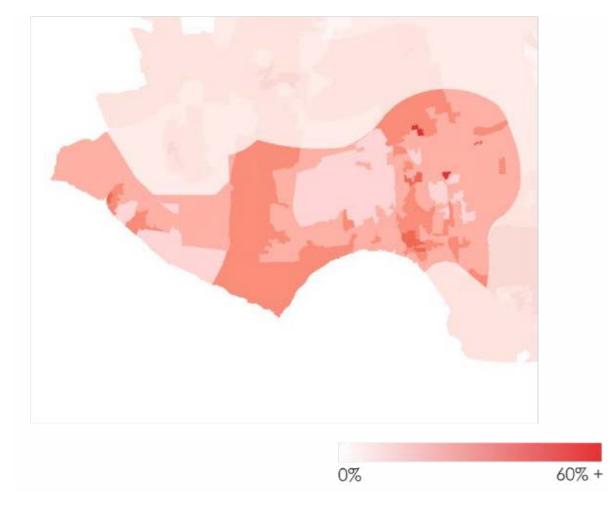


Figure 17. Annual mean concentration Of NO₂ (μ g/m³) (Stantec)

7. AFFORDABILITY

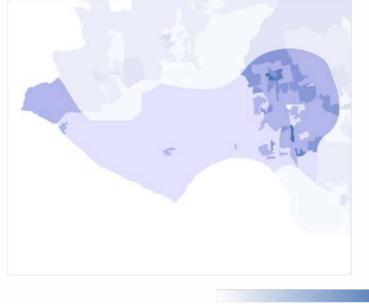


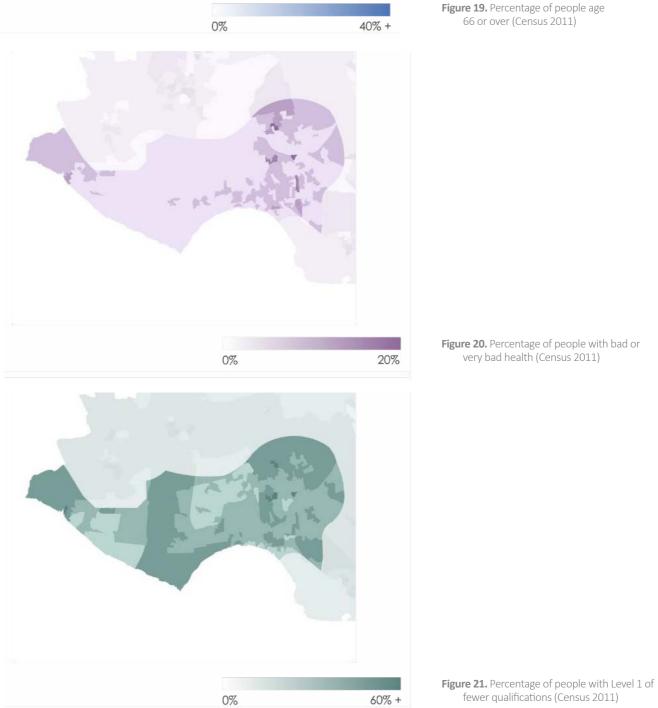
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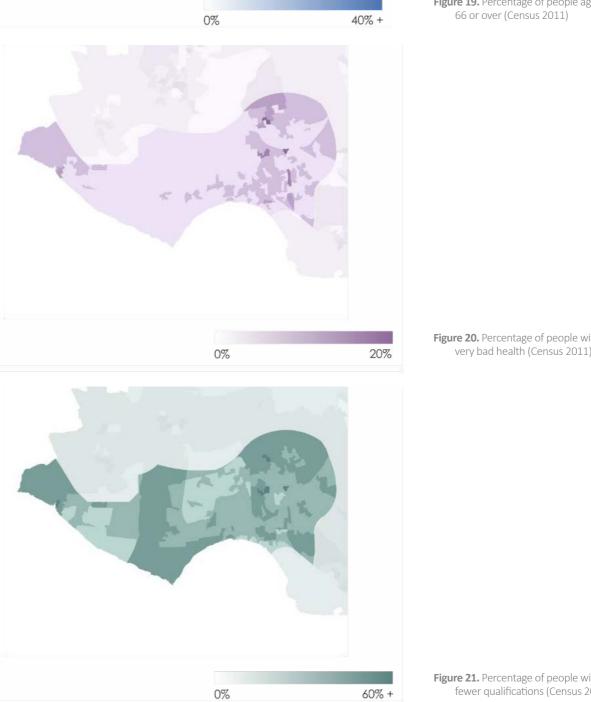


Overview of deprivation, health, age & education

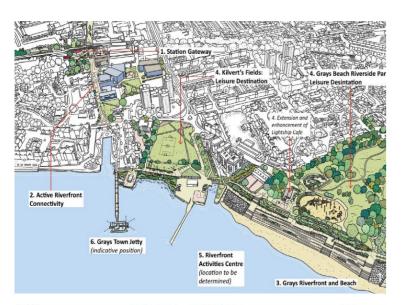
- Figure 18 show an overview of deprivation, 7.0 health, age and education levels in the Thurrock urban area.
- **Deprivation** –24% of people are noted as 7.0 deprived in more than one dimension, with small areas of increased deprivation in Grays and Chafford Hundred.
- Health health measures are primarily 7.0 good across the area, with a mean of 4% of the population in the area with bad or very bad health. Similarly to deprivation, some areas in Grays and Chafford Hundred have increased health issues.
- Age -An average of 10% of the population 7.0 in the area is over 66. This is higher in the eastern parts of the area.
 - Education –39% of the population in the area has level 1 or no qualifications,







8. OPPORTUNITIES





- 1. Grays Town Centre Regeneration
- 2. Thurrock urban area local plan consultation materials
- 3. Thurrock Yacht Club

Thurrock Urban Area Opportunities

- The Council has undertaken local community consultation as part of the development of the new Local Plan. These exercises identified a range of local transport issues and opportunities as well as potential to accommodate new development.
- This section is not intended to be a comprehensive list of all opportunities but serves to illustrate a range of potential opportunities in the Thurrock Urban Area.

Grays Transport Opportunities

- Improving Air quality- Thurrock urban area has several Air Quality Management Areas (AQMA) - areas that exceed the national air quality objective for a specific pollutant. These are all related to transport and are concentrated to the south of the sub area along London Road corridor.
- **Grays Station micro mobility-** Micromobility modes can potentially be integrated into routes leading to public transport hubs at Grays Station with provision for charging and storage at the hubs themselves. This will help facilitate sustainable access to stations and potentially expand the station catchment areas.
- Grays Town Centre Micro mobility freight – Microbiology could offer a low carbon solution for last mile freight deliveries in Grays Town Centre and reduce large service vehicle sparking and operating within the centre.
- 8.0 Grays Rail Station enhancement-Opportunities to enhance the station environment to support access to rail and encourage sustainable travel for users of all abilities.
- **Grays Station enhanced multi-modal interchange-** Potential to enhance the interchange hub around station with enhanced facilities for bus users, demand responsive travel, cyclists, pedestrians, and micro-mobility, enabling enhanced interchange between modes of travel for trips to access rail or for onwards journeys from rail stations.

- Grays station level crossing- Opportunity for new pedestrian crossing to replace the unsafe level crossing. Provision for micro mobility charging and storage.
- Grays Town Centre Masterplan

 Opportunities to build upon the current projects to improve economic growth and enhance the public realm. Grays is the largest 'traditional' town centre in Thurrock and contains 66,300 sqm gross floorspace in total. Whilst the town centre's role as the dominant retail centre in the area has been superseded by Intu Lakeside Shopping Centre, it is still the main administrative centre in the Borough and a focus for several services and cultural activities.
- Estate Regeneration Opportunities to connect Seabrooke estate regeneration with wider growth and transport infrastructure development plans.
- 8.0 Growth Hub Grays is one of Thurrock's six growth hubs and one of seven main employment clusters.
- Key Strategic Economic Hub Grays
 Town Centre is one of five Key Strategic
 Economic Hubs across the Borough. This
 may be amalgamated into one of three
 larger composite economic hubs –Thurrock
 Central (including Grays Town Centre,
 Tilbury and the London Port of Tilbury).
- Grays Employment cluster Grays Town Centre is a small urban cluster accommodating minor and finer-grained employment activities than other clusters. The cluster benefits from is good public transport accessibility via Grays train station but access to the strategic road network is more limited.
- Grays Office cluster Grays is one of four clusters of current office activity in Thurrock and one of the best locations to focus the delivery of new office floor space in the future, supporting the co-location of activities, which is attractive for small businesses and beneficial for their growth and development - as well as providing the opportunity to plug into the existing infrastructure, which is crucial for drawing new businesses to an area.
- **Grays road access -** Road connectivity to the north via the A1012 is good. East-west connections via the A126 is congested.



Major Scheme (MS7): M25 Junction 30/31-The M25 J30/31 junction connects the M25 with the A13 trunk road and provides local connections to Lakeside Basin and Port of Tilbury Thurrock is working with partner agencies to explore opportunities to provide capacity and highway enhancements at the M25 J30/31

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to provide improved capacity for local trips, particularly by active travel.

Grays mass rapid transit interchange-Major interchange at Grays at the convergence of connecting t transit (East London Transit, Ken FastTrack, South East Essex Rapid Transit (SERT) and potential future upgrade to a tram system (Kennex).

Cross-river Public Transport Link -Potential MRT link from Grays Beach area to Swanscombe Peninsula and Dartford/ Ebbsfleet.

Thurrock Park Way link bridge – Potential public transport, walking an cycling and green bridge link from Thurrock Park Way to Curzon Drive and Manor Road and Broadway.

Grays Passenger pier- Thurrock is working with partner agencies and developers to create a new pier at Grays offering fast Riverbus services to central London and cross-river connections to Gravesend and the Swanscombe Peninsula.



Purfleet

- The Purfleet Centre regeneration project 8.0 - aims to transform Purfleet-on-Thames into a riverside destination. Part-funded by £70m from Homes England, this major regeneration of the the surrounding brownfield site to deliver the 'Purfleet-on-Thames' mixed-use development on the waterfront will include around 2,600 new homes and generate around 2,300 new jobs. The site will be supported by new infrastructure including a new primary school, healthcare centre and upgrades to the railway station and level crossing.
- Purfleet Town centre development of 8.0 new town centre associated with planned new housing and estate regeneration.
- Dartford Crossing capacity- High traffic 8.0 demand over the Dartford Crossing, with congestion, poor journey time reliability and pollution
- Dartford Crossing Public Transport Links 8.0 across Dartford Crossing with direct access from London Road.
- **Purfleet Port** the protected wharves at 8.0 Purfleet Port help maintain freight access to the River Thames maximising the opportunities for transferring road freight to the river and east-west movement of goods, local river freight and short sea shipping, particularly between the ports and central and east London.

- Purfleet Port is an intermodal terminal 8.0 handling approximately 250,000 trailers, containers and tanks per year including the import and export of 400,000 vehicles.
- Purfleet Industrial wharves The industrial 8.0 wharves are safeguarded t to increase opportunities for the movement of goods, waste, and construction material by water between London and Thurrock. This port activity has attracted and supported a significant transport and logistics activity cluster in this part of Purfleet, with other potential employment sites in the area, which could help grow and expand these activities.
- High House Production Park an 8.0 international centre of excellence for creative industries in Thurrock working in partnership with the Royal Opera House, Creative & Cultural Skills, Acme Studios and Thurrock Council. The first phase of development of the fourteen-acre site, its heritage buildings and public park, was completed in 2010 w followed in 2013 by the launch of Creative & Cultural Skills' Backstage Centre, a world class production, rehearsal and training venue for performance, broadcast, and live events. Further phases are planned.
- Purfleet level crossing A schemes to 8.0 remove level crossings are already under way, or under consideration at Purfleet.

- Growth hub- Purfleet is one of Thurrock's 8.0 six growth hubs.
- Garrison Estate regeneration -8.0 Opportunities to connect estate regeneration with wider growth and transport infrastructure plans.
- Small/medium scale urban extension 8.0 – A part of the new Local Plan a development of up to 2,850 homes is under consideration maximising the walkable catchment population of rapid transit stops/stations and mixed-use centres.
- Purfleet passenger ferry pier Thurrock is 8.0 working with partner agencies to provide a passenger jetty at Purfleet Ports to serve Riverbus services to central London and cross-river ferries to Gravesend and the Swanscombe Peninsula.
- Key Strategic Economic Hub Purfleet 8.0 is a Key Strategic Economic Hub in the Borough. In future this may be amalgamated a larger composite economic hubs of Thurrock West including Purfleet, Port of Purfleet and Lakeside.

8.0

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- Gateway and clock tower to the former Ordnance Yards at Purfleet.
- Purfleet riverside.
- Hollow Cottages, Purfleet.
- The Purfleet Centre regeneration project aims to transform Purfleet-on-Thames into a riverside destination.

Purfleet and West Thurrock employment cluster - contains the most concentrated cluster of employment sites in Thurrock with good public transport accessibility, connections to the strategic road network (A13 & M25) and proximity to London markets and the Lakeside.

Purfleet office cluster - Purfleet is one of four clusters of current office activity in Thurrock providing the best location for new office floor space, supporting the colocation of activities and plugging into the existing transport network.

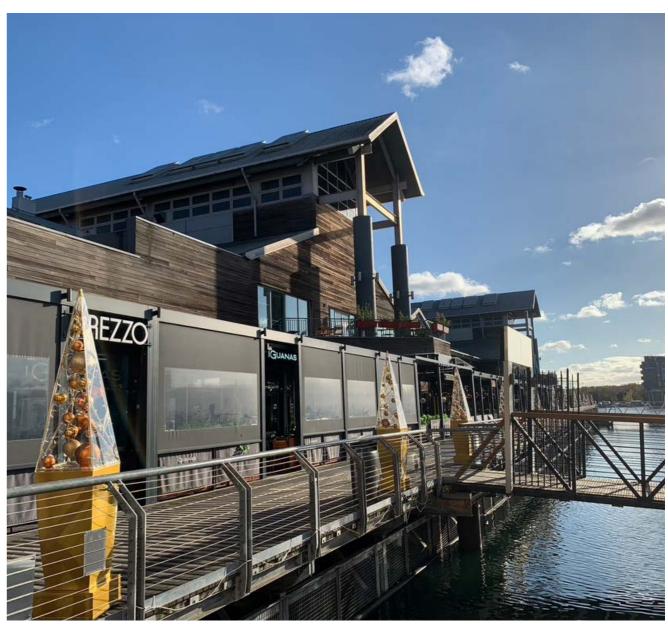


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Lakeside and West Thurrock

- Major Scheme (MS3): East-Facing Access 8.0 - Thurrock will continue to promote the East Facing Access (EFA) programme to ensure improved access to the Lakeside Basin, reducing traffic on local roads in neighbouring Chafford Hundred.
- Chafford Hundred Station Opportunities 8.0 to enhance interchange provision to support access to rail and encourage sustainable travel for users of all abilities. Potential for a future platform to service a two-track rail line. Provision for micro mobility charging and storage.
- Micromobility- Micro-mobility modes 8.0 can potentially be integrated into routes leading to public transport hubs at Chafford Hundred rail station and Lakeside bus station with provision for charging and storage at the hubs themselves. This will help facilitate sustainable access to stations and potentially expand the station catchment areas.
- Lakeside Regional Centre and Retail Park 8.0 - a major retail and leisure destination and set to expand to become a regional town centre. Intu Lakeside shopping centre is the primary comparison retail destination within the South Essex area and exerts a significant influence over trading patterns across the wider study area.

- Lakeside Growth Hub Lakeside one of Thurrock's six growth hubs - one of three in the Thurrock sub area. The principle of transforming the northern part of the Lakeside Basin into a sustainable, mixeduse regional town centre is established in policy through Policy CSTP7: Network of Centres, of the adopted Thurrock Core Strategy (December 2011).
- Lakeside- large-scale urban extension 8.0 -. An urban extension on land at Arena Essex to the north of Lakeside has the potential to accommodate new homes and additional community, educational and/ or health facilities to support residential development across the wider area, alongside more mixed-use development including new homes adjacent to the Intu Lakeside Shopping Centre and retail parks. Potentially up to 2,500 new homes in the basin and a further 2,500 north at Arena Essex.
- Key Strategic Economic Hub Lakeside/ 8.0 West Thurrock is one of five Key Strategic Economic Hubs across the Borough. West Thurrock hosting the largest single concentration of employment activity in the Borough. The hub may be amalgamated to form a larger composite economic hub – Thurrock West (including Purfleet, Port of Purfleet and Lakeside).
- West Thurrock Employment cluster West 8.0 Thurrock (extending across to Purfleet) contains the most concentrated cluster of employment sites with good strategic road network connections (A13 & M25). and proximity to London markets and the Lakeside retail clusters and good accessibility for public transport.



North Grays

- North Grays Small/medium scale urban 8.0 extension - An urban extension to the north of Grays has the potential to accommodate a new neighbourhood with associated amenities, local centre enhancements and a linear park offering leisure and recreational opportunities for existing and future residents. Consultants to the Council (David Lock Associates) assessed a modest northern expansion delivering c1000 homes but heavily constrained by LTC/A13 interchange.
- North Grays Small- scale urban extension 8.0 - Potential for up to 500 homes with associated transport and public realm enhancements alongside traffic, active travel and bus capacity/frequency improvements.

8.0

Local Parades

The Thurrock Urban Area includes three existing smaller urban centres with opportunities to improve public transport accessibility and street enhancements (Stifford Clays Local Neighbourhood Parade, Socketts Heath Local Centre and Little Thurrock Local Parade).

GLOSSARY

ASELA THE ASSOCIATION OF SOUTH ESSEX LOCAL AUTHORITIES - a partnership of neighbouring councils that have come together to promote growth and prosperity in the region (https://www. southessex.org.uk)

AQMA AIR QUALITY MANAGEMENT AREA

BLUE GRID - A multi-functional network of greenspace and links along and across Thurrock's rivers, waterways, and water bodies.

BRT BUS RAPID TRANSIT - A high-quality busbased transit system that delivers fast and efficient service that may include dedicated lanes, busways, traffic signal priority, off-board fare collection, elevated platforms, and enhanced stations.

C2C A train operating company operating the Essex Thameside railway contract.

CCTV CLOSED CIRCUIT TELEVISION

CO₂ CARBON DIOXIDE - Carbon dioxide gas emissions stem from burning fossil fuels such as petrol car engines and cause pollution and leading to climate change.

DROIDS - Small, semi and fully autonomous vehicles acting as couriers that may reduce the need for cars or lorry deliveries in built-up areas.

DRONES - A driverless aerial vehicle typically used to distribute packages to consumers during the 'last mile' delivery process. These drones generally have 4-8 propellers, rechargeable batteries, and the ability to carry lightweight containers.

ENGLAND COASTAL PATH – A long-distance National Trail proposed by Natural England following the coast of England.

FASTRACK - A Bus Rapid Transit system serving Dartford, Bluewater, Ebbsfleet and Gravesend connecting major existing and new developments with planned core express routes on which only Fastrack services will run.

FREEPORTS special areas within the UK's borders where different economic regulations apply. (https://www.gov.uk/guidance/freeports)

GREEN GRID - A sustainable network of multifunctional green space and links within Thurrock's towns and countryside.

HEALTHY STREETS – A framework for prioritising people and their health in transport, the public realm and planning policies and strategies (https://www. healthystreets.com/what-is-healthy-streets).

HGV HEAVY GOODS VEHICLE

HS1 HIGH SPEED 1 - A 109km high-speed railway rail line between St Pancras International in London and the Channel Tunnel with intermediate stations at Stratford International and Ebbsfleet International. The line with international high-speed rail links to Paris, Brussels and Amsterdam. The route is also used by the 'Javelin' domestic route from London to Kent.

HS2 HIGH SPEED 2 - A new railway from London to Birmingham and further north. The railway's London terminus will be at Euston. with a west London interchange at Old Oak Common.

JAVELIN - A high-speed train service operated by Southeastern trains between London St Pancras and Kent using the HS1 line (https://www. southeasternrailway.co.uk).

KENNEX - A proposed tram link. The planned network connects Ebbsfleet International, Grays & Gravesend to Northfleet, Swanscombe Peninsular, Chafford Hundred & Purfleet-on-Thames (https://kenextransit.co.uk).

LGV LIGHT GOODS VEHICLE

LTC LOWER THAMES CROSSING - A road crossing of the Thames estuary downstream of the Dartford Crossing linking Kent and Essex proposed by National Highways (https://nationalhighways.co.uk/our-roads/ lower-thames-crossing)

MICRO-MOBILITY - A range of small, lightweight vehicles operating at speeds typically below 25 km/h (15 mph) and driven by users personally. Micromobility devices include bicycles, e-bikes, electric pedal-assisted bikes, electric scooters, electric skateboards and shared bicycle fleets.

MODAL SHIFT - Changes in travel behaviour and habits. For example, travelling by public transport instead of a private car.

MODE - The different ways passengers and/or goods can be transported. Transport. Modes for passengers and goods may include rail; maritime (sea); road; bus, and rivers.

MRT MASS RAPID TRANSIT - High-capacity, higherspeed road or rail-based public transport systems generally found in urban areas and travelling along dedicated paths.

MULTI-MODAL ROADS - Streets designed to serve different modes and provide multiple mobility options for their users. (https:// globaldesigningcities.org/publication/global-streetdesign-guide/defining-streets/multimodal-streetsserve-people)

NPPF NATIONAL PLANNING POLICY FRAMEWORKrevised on 20 July 2021. (https://www.gov.uk/ government/publications/national-planning-policyframework)

NET ZERO - Policies and proposals for decarbonising the UK economy to reduce net global greenhouse gas emissions to near zero by 2050.

NOX NITROUS OXIDE

PARK AND GLIDE – A combined remote parking and commuter boat transfer service. 'Thames Clipper' currently operates a service from the O2 in Greenwich into central London.

PPG PLANNING POLICY GUIDANCE.

RIVERBUS – Boat services and access piers along the Thames, including the 'Thames Clipper' commuter service (https://www.thamesclippers. com).

RTI REAL-TIME TRAVEL INFORMATION.

SERT SOUTH ESSEX RAPID TRANSIT. Proposal for a fast, reliable and high quality bus-based public transport system in south Essex including 'Route 1a' serving Lakeside, Grays, A13, and Basildon Hospital.

SHORT SEA SHIPPING - Maritime transport of goods over relatively short distances, as opposed to the intercontinental cross-ocean deep sea shipping.

SRN STRATEGIC ROAD NETWORK - The major road transport network comprising secondary arterial roads, primary arterial roads, expressways and motorways managed by National Highways. **STB** SUB-NATIONAL TRANSPORT BODY.

THAMES ESTUARY – The lower reaches of the Thames including outer east and south east London, North Kent, and South Essex.

THAMES PATH - National Trail following the River Thames from its source to the Woolwich in south east London. The Trail connects with the England Coastal Path to form a 'Source to Sea' route.

THURROCK LOCAL PLAN - A long-term planning policy framework setting out the amount of development for Thurrock and its distribution across the borough that, by law, must be used when deciding all future planning applications (https://www.thurrock.gov.uk/new-local-plan-forthurrock/thurrock-local-plan).

TRANSPORT EAST - A sub-National transport body to deliver a collective vision for the future of transport in Essex, Norfolk, Suffolk, Southend-on-Sea and Thurrock.

TRANSPORT SOUTH EAST - A sub-national transport body for the South East of England **TOC TRAIN OPERATING COMPANY -** A business operating passenger trains under the collective National Rail brand, typically as a franchise, such as C2C.

TFL TRANSPORT FOR LONDON - the organization responsible for managing the public transport services in London, including bus and underground train services, taxi services and the road (https://tfl. gov.uk/corporate/about-tfl).

THAMES ESTUARY GROWTH BOARD - A private sector organisation covering North Kent, South Essex, East London, the City of London and the River Thames that has developed an action plan, 'The Green Blue' (http://thamesestuary.org.uk).

THURROCK LOCAL TRANSPORT PLAN - A plan describing future outcomes and priorities for transport and travel across Thurrock, including the action needed to implement the strategy. The plans consist of four parts- 'Issues and Opportunities', 'Vision 2050', 'Strategy', and 'Action and Implementation Plan(s)'.

